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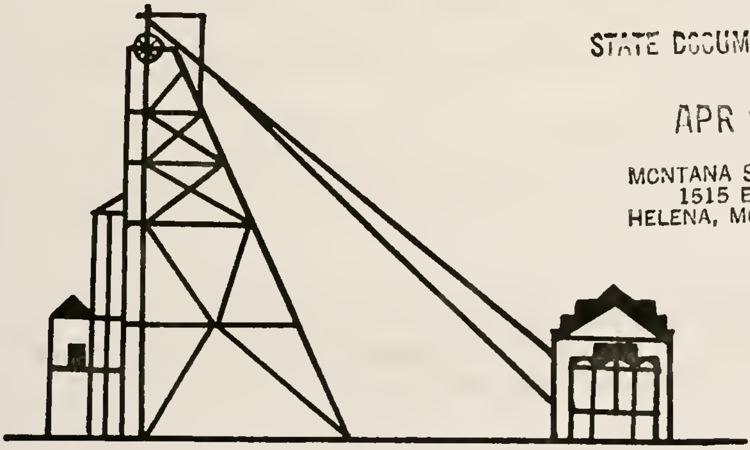

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# CULTURAL RESOURCE INVENTORY AND EVALUATION

## Of Selected Coal Mines in the Great Falls Coal Field, Montana

for

The Montana Department of State Lands
1625 - 11th Avenue
Helena, Montana 59620

by

GCM Services, Inc.

June 1987

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Helena, Montana 59620

by

Gene Munson
Cultural Resource Division
GCM Services, Inc.
P. O. Box 3047
Butte, Montana 59702

Report No. 92-3-87

May 1987

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# ABSTRACT

Cultural resource inventory of eight mines within the Great Falls coal field and two immediately west of the field was conducted for the for the Montana Department of State Lands (DSL) Abandoned Mine Reclamation Program. The coal mine sites in Cascade County are the: Farrell-O'Neil (24CA273), Rimmer (24CA-274) and Pierce (24CA275). The coal mines in Judith Basin are the: Keith (24JT152), Nullimer (24JT153), Nollar (24JT154), McAllister (24JT155), McCarty Grade (24JT156), Chambers (24JT157) and Miner (24JT158).

The Department of State Lands listed a Johnson Mine in Section 31, T19N, R5E, however, this site was determined to be part of the Centerville Complex of mines (24CA150) which has already been inventoried for cultural resources (Anderson 1982).

Most of the mines studied in this report were active during the 1920s and 1930s except for the Nollar which opened in 1902 and the Farrell-O'Neil which did not close until 1952. The mines were also similar in that all were small "wagon" mines (except for the Pierce) which operated during the fall and winter, usually employing about three or four men.

Few cultural remains still exist at these sites other than coal waste and the remnants of the tipples. All the sites have lost their physical integrity and are not recommended as eligible for listing on the National Register of Historic Places.

## TABLE OF CONTENTS

LIST OF FIGURES.................................................... iii

LIST OF TABLES..................................................... iv

INTRODUCTION....................................................... 1

METHODOLOGY........................................................ 3

PHYSICAL SETTING................................................... 4

GEOLOGY OF THE GREAT FALLS COAL FIELD.............................. 4

HISTORIC BACKGROUND OF THE GREAT FALLS COAL FIELD.................. 5

HISTORIES OF THE STUDY GROUP MINES.................................. 6

SITE NARRATIVES.................................................... 7
  Farrell-O'Neil Mine (24CA273).................................... 7
  Rimmer Mine (24CA274)............................................ 7
  Pierce Mine (24CA275)............................................ 8
  Keith Mine (24CJT152)............................................ 8
  Nullimer Mine (24JT153).......................................... 8
  Nollar Mine (24JT154)............................................ 9
  McAllister Mine (24JT155)........................................ 9
  McCarty Grade Mine (24JT156)..................................... 9
  Chambers Mine (24JT157).......................................... 10
  Miner Mine (24JT158)............................................. 10

SUMMARY AND RECOMMENDATIONS........................................ 11

REFERENCES CITED................................................... 15

APPENDIX A: Site Forms

# LIST OF FIGURES

1. Map showing locations of mines inventoried........................ 2

## LIST OF TABLES

1. DSL and historic names and Smithsonian numbers for the mines..... 1

2. Legal descriptions of project mines.............................. 3

3. Summary of inventory data for the coal mines recorded on this project.......................................................... 12

## INTRODUCTION

In November of 1986 GCM Services, Inc. in Butte, Montana was contracted by the Montana Department of State Lands (DSL) to perform a cultural resource inventory and evaluation of selected abandoned coal and hardrock mines in Montana.

In the interest of public safety and health the DSL, as part of its abandoned mines reclamation project, plans to seal mine adits, remove any unsafe structures and either remove or reclaim tailings and coal spoil dumps.

This report presents the results of the inventory of selected mines in the Great Falls Coal Field and immediately to the west of the field (Figure 1). The following report describes the physical setting, historic background and present state of the Farrell-O'Neil Mine (24CA273), Rimmer Mine (24CA274), Pierce Mine (24CA275), Keith Mine (24JT152), Nullimer Mine (24JT153), Nollar Mine (24JT154), McAllister Mine (24JT155), McCarty Grade Mines (24JT156), Chambers Mine (24JT-157) and the Miner Mine (24JT158).

Field investigations were conducted in March and April of 1987 by Gene Munson. The project maps were prepared by Jim Duran and the report was edited by Paul Anderson.

A site inventory form for each mine site makes up Appendix A. For each site there is detailed information on the existing features, a historic discussion and an evaluation of the site in terms of its contribution to the history of central Montana. Maps and photographs supplement the written material. These site forms remain on file at the state repositories at the State Historic Preservation Office, Helena, and the Department of Anthropology, University of Montana, Missoula.

All field notes, photographs and supportive information resulting from the cultural resource fieldwork will be maintained at the office of GCM Services, Inc., Butte, Montana.

Table 1 provides a cross-reference for the names given to the mines by the Department of State Lands, their historic names and Smithsonian number.

Table 1. DSL and historic names and Smithsonian numbers for the mines.

| DSL Designation | Historic Designation | Smithsonian Number |
|---|---|---|
| Four Corners | Farrell-O'Neil | 24CA273 |
| Four Corners | Rimmer | 24CA274 |
| No Name | Pierce | 24CA275 |
| Raynesford A | Keith | 24JT152 |
| Raynesford A | Nullimer | 24JT153 |
| Noller | Nollar | 24JT154 |
| Raynesford B | McAllister | 24JT155 |
| Raynesford C | McCarty Grade | 24JT156 |
| Raynesford D | Chambers | 24JT157 |
| Miner | Miner | 24JT158 |

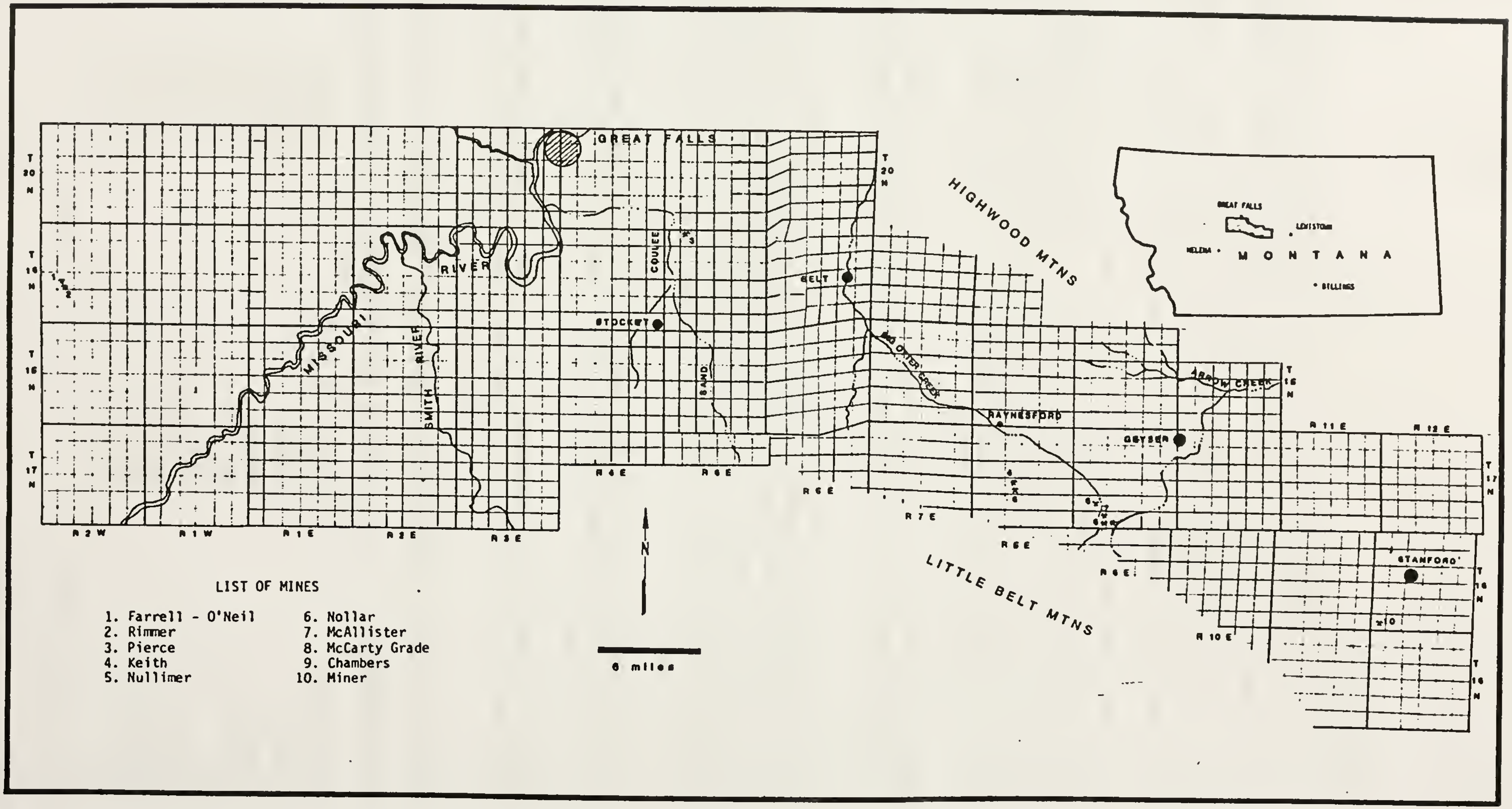

Figure 1. Map of the Project Area.

Table 2 provides the legal locations of the sites.

Table 2. Legal descriptions of project mines.

| | |
|---|---|
| Farrell-O'Neil | T19N R2W SE1/4 SW1/4 NW1/4 Section 20 |
| Rimmer | T19N R2W SW1/4 NE1/4 SW1/4 Section 20 |
| | T19N R5E NW1/4 NW1/4 NW1/4 Section 5 |
| Pierce | T20N R5E SW1/4 SW1/4 SW1/4 Section 32 |
| | NW1/4 SW1/4 |
| Keith | T17N R8E SW1/4 NW1/4 NE1/4 Section 21 |
| Nullimer | T17N R8E NW1/4 SE1/4 SE1/4 Section 21 |
| Nollar | T17N R9E N1/2 S1/2 NW1/4 Section 29 |
| McAllister | T17N R9E NW1/4 NW1/4 NE1/4 Section 32 |
| | S1/2 NE1/4 |
| McCarty Grade | T17N R9E NW1/4 NE1/4 SE1/4 Section 32 |
| | NW1/4 SE1/4 |
| Chambers | T17N R9E NE1/4 SW1/4 SW1/4 Section 33 |
| Miner | T16N R12E SE1/4 NE1/4 SE1/4 Section 31 |
| | NE1/4 SE1/4 SE1/4 Section 31 |
| | SW1/4 SW1/4 SW1/4 Section 32 |

## METHODOLOGY

Prior to the initiation of fieldwork the state site files at the University of Montana, Montana Historical Society's Historic Preservation Office files, and the Historic Sites Compendium (Montana Fish and Game Commission 1975) were searched for previously recorded sites in the area. The Government Land Office records at the Bureau of Land Management's records division in Billings, Montana was consulted for relevant GLO plat maps, historic survey plat maps and historical indices showing site ownership and historical features in the vicinity.

The site areas were carefully examined through a pedestrian inventory following standard archeological survey procedures. These pedestrian surveys are designed to provide the most complete coverage of an area possible. Undisturbed areas were systematically examined for possible prehistoric activities.

The survey is designed to meet all legal requirements of the National Historic Preservation Act 1980 Amendments. The information provides all necessary data to allow agency review for National Register of Historic Places (NRHP) eligibility and a determination of the effects of the proposed action.

All sites located are recorded on standard site forms and are assigned a site number by the state site files office at the University of Montana under the trinomial system of the Smithsonian Institution. Each site is examined, structures measured and a sketch map drawn showing the location of artifacts, cultural features and/or structures and their relationship to natural features within the site area.

Each site is photographed in black and white negative and color positive film. On historic sites all features and structures are photographed to show significant aspects in detail.

## PHYSICAL SETTING

The Great Falls coal field is located adjacent to the Little Belt Mountains and the Highwood Mountains. The topography is characterized by high hills and ridges that have been dissected by numerous and relatively deep drainage channels. It is along the faces of these coulees where the coal outcrops and subsequently the mines are located.

Payne (1973) shows three vegetative rangeland types located within the Great Falls coal field. The majority of the coal field lies within the Teton River - Judith Basin Grassland rangeland type which is characterized by large amounts of sandberg bluegrass and prairie junegrass. Soils are sandy to stoney to silt loams. In the higher elevations the vegetative rangeland type in the coal field is labeled as foothill grassland. The vegetation is characterized by wheatgrass, fescues and needle-and-thread. Soils are sandy and gravelly loams to silt and clay. There is a small area at the extreme southern portion of the Great Falls coal field that falls within the northern grassland category. This rangeland type is characterized by blue grama, western wheatgrass and dryland sedges. The soils are loams to stoney loams.

## GEOLOGY OF THE GREAT FALLS COAL FIELD

The Great Falls coal field as described by Fisher (1906), comprises 1500 square miles located principally in Cascade County but includes part of Judith Basin County. It is bounded on the south by the Little Belt Mountains and on the north by the Highwood Mountains (Figure 1). On the west it stops a few miles west of Great Falls where the Morrison and Kootenai formation contact is no longer exposed. On the east it borders the Lewistown Coal field (Calvert 1909). This is about 10 miles west of the Judith River. In short, the Great Falls coal field is defined as the area in the vicinity of Great Falls where the coal found at the Morrison and Kootenai formation contact is exposed.

For this report the Great Falls coal field has been extended 12 miles further west to include the coal that was mined north of Cascade, Montana (i.e., the Rimmer and Farrell-O'Neil mines). Here remnants of the Eagle formation are located. The coal in this Upper Cretaceous Period formation was mined at a much smaller scale than that found in the nearby Upper Jurassic Morrison coal.

The Morrison formation coal ranges from being subbituminous to bituminous (Silverman and Harris 1967. Analysis from the Rimmer mine shows the coal as being comparable in calorific value, ash content, volatile matter and fixed carbon to that of the Morrison formation coal. The biggest differences is that it is much lower in sulphur (Fieldner, et al. 1932).

The Great Falls coal field can be divided into basins or districts on the basis of the thickness and lateral extent of the coal and carbonaceous shale (Silverman and Harris 1967). The four basins are Stockett-Sand Coulee, Belt Creek, Otter Creek, and Sage Creek. For this report the mines inventoried are located in the Stockett-Sand Coulee basin (Economy Mine); Otter Creek basin (Noller Mine, Ed McAllister Mine), McCarty Grade Mines, Chambers Mine, Keith Mine and Nullimer Mine); and the Sage Creek basin (Miner Mine).

## HISTORIC BACKGROUND OF THE GREAT FALLS COAL FIELD*

A transplanted Pennsylvanian, John K. Castner, was one of the first to recognize the potential of the exposed coal seams along Belt Creek and filed claims on the bituminous coal-bearing lands in the area in 1877. For the next few years Castner operated a small "wagon" mine and hauled coal in mule team wagons to Fort Benton for use by the steamboats and the local community. Coal was also initially mined at nearby Sand Coulee during this period and was hauled by wagons to Fort Benton. By 1885 the combined production from the Sand Coulee and Belt mines was 1900 tons, with 1200 tons coming from Belt. The coal trade was apparently profitable since the Fort Benton River Press in September 1887 reported that large piles of coal from Belt and Sand Coulee were on the levees for use by the steamboats (Chadwick 1973; Cascade County Historical Society 1981; Stober 1979).

Major development of the Belt-Sand Coulee coal fields did not occur until the coming of the railroad. In 1887 Jim Hill's St. Paul, Minneapolis, and Manitoba Railroad (soon to be called The Great Northern Railway) laid tracks from Minot, North Dakota to the new town of Great Falls in one season. By 1888 a branch line had been opened to Sand Coulee and in 1891 the railroad passed through Belt on its way to the silver mines at Neihart. Coal production expanded to fill the increasing consumption by the railroads and the growing community of Great Falls. Coal demand increased even further when the Anaconda Company's copper smelter was opened in Great Falls in 1892. When Castner first opened his Belt mine he built several experimental coke ovens. Later a hundred beehive coke ovens -- each with a capacity of three tons -- were in operation to supply the Great Falls smelter. Unfortunately, the benches of coking coal could not be economically separated from the non-coking coal and the ovens were closed down. During the 1950s these ovens were dismantled to salvage the bricks (Chadwick 1973; Stober 1979).

The major economic force in the Belt-Sand Coulee area was the Anaconda Copper Mining Company which determined the demand for coal and also owned and operated several of the largest mines. In 1891 the Company acquired the Castner Coal and Coke Company in Belt and operated it until 1912. At Sand Coulee the Company acquired the Lochray Coal Company in 1914 and ran it for the next ten years (Morgan 1966).

The Anaconda Mine at Belt was taken over by G. W. Merkle in 1913. Other major mines in the area would include the G. W. Merkle and the Nelson Mine at Sand Coulee which furnished a large share of the coal used by the Great Northern Railroad. The railroad also operated its own mine at Stockett in the 1890s under a subsidiary, the Cottonwood Coal Company. This same company developed a mine at Giffen, a few miles south of Stockett, during the early 1930s which remained in production until 1946 when the Great Northern took the last of its steam locomotives out of service (Morgan 1966).

Almost all the area's mines were drift mines -- so named because the coal could be reached by horizonal "drifts" driven into the coal from the side of a hill. The room-and-pillar method of mining the coal was generally used. While this method was not the most efficient for coal recovery, it did save on labor costs (Stober 1979).

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*Much of the following is taken from Anderson (1982).

The mines varied in size from the large Castner-Anaconda Mine at Belt which produced around 300,000 tons a year for 25 years to the small wagon mines such as those inventoried in this report. The mines employed just a few men in the smaller mines to hundreds in the larger ones.

The Brown and the Farrell-O'Neil mines, which are located immediately west of the Great Falls coal field, produced coal out of the Eagle formation instead of the Morrison formation. All of the local mines located within the Eagle formation were small wagon mines. Even though the hotter burning Morrison formation was readily available for residents in the Cascade County, many preferred the equally available Eagle formation coal since it burned cleaner (i.e., had less sulphur (Monroe 1987).

The coal boom in the Belt and Sand Coulee area came to an end during the 1920s. The coal seams were running shallow with a greater percentage of rock, making it increasingly expensive to mine. More important, demand declined. The Anaconda refinery ceased to use coal or coke for its furnaces; domestic users began to switch to natural gas and fuel oil; and the Great Northern Railroad began to use oil-burning steam locomotives and eventually converted to diesel engines (Chadwick 1973).

By the 1930s all the major mines had closed except for the Cottonwood Coal Company's mine at Giffen. A few small wagon mines supplied coal for local domestic use during the Depression and there was a slight increase in demand during World War II. With the closing of the Giffen mine in 1946, coal production in the area virtually ceased except for a few small wagon mines which operated until 1955.

The Great Falls field produced almost 36 million tons of coal during the period from 1885 to 1955, approximately 23 percent of the total state production.

Nearly a third of the total tonnage was mined during the first two decades of this period. Over 15 million tons was produced during the life of the field by three of the largest mines: the Castner-Anaconda mine at Belt (7.5 million tons over 25 years); the Lochray-Anaconda mine at Belt (2.3 million tons over 10 years); and the Cottonwood mine near Stockett (5.4 million tons over 15 years). The Great Falls field also employed a majority of the state's 3,000 to 4,000 coal miners (Silverman and Harris 1967).

## HISTORIES OF THE STUDY GROUP MINES

The coal mines examined in this report are typical of the small wagon mine found throughout the Great Falls coal field and the area immediately to the west. The histories of these mines are illustrative of a period when coal was the dominant type of fuel used in the home as well as in industry. It also represents a time when a large number of mines were family owned and operated. The histories of these mines also show that it was not the depletion of the coal resource that caused the decline and eventual abandoment of coal mining in the Great Falls coal field but rather was due to the shift from coal-fired, to diesel powered locomotives and from competition from other kinds of fuels (i.e., natural gas and oil).

## SITE NARRATIVES

Site: Farrell-O'Neil Mine (24CA273)

Historical information: The site is within Stock Raising Homestead Patent #1078323 dated September 17, 1935. The patent was filed by John J. Farrell (GLO Records). The coal is owned by the federal government and a federal coal lease was granted to Richard H. Farrell in 1923 (Great Falls #053242). This lease was for 40 acres in the NW1/4 SW1/4 of Section 20. The application was protested by E. R. Jones, Simms, Montana on the grounds of superior equities. The GLO records do not state specifically what the superior equities were but it is probable that Jones was already mining at the site. In 1933 E. Ford, E. M. Smith, Joseph O'Neil and Walter Woodrow received a federal coal lease (Great Falls #079140) for the SW1/4 NW1/4 of Section 20. In 1937 Joseph O'Neil was assigned a coal lease (Great Falls #053242) and surrendered it in 1949. Coal lease Great Falls #079140 was reliquished in 1954. The 1952 inspectors map of the mine shows only four adit entries. It is assumed that the other two mine entries observed during the current field inspection were made after 1952 (GLO Records).

According to Robert O'Neil (Joseph O'Neil's son) the underground workings in the mine were around 5.5 feet high even though the coal seam, including partings, was only 44 inches thick. The reason the extra foot or so of the ground above the coal seam was taken out was to make it easier to get around in the mine. There were three seams of coal. The bottom seam measured 16 inches thick with a six inch parting then an 10 inch coal seam with a four inch parting and then an eight inch coal seam. The mine tunnels were timbered every four feet. The 1000 pound coal cars were pushed out of the mine by hand.

The coal was sold to the communities of Fairfield, Augusta, Great Falls and Helena. Customers liked the coal because it burned hot and had very little sulphur. However, it did leave a lot of ash. Some of the customers would shift through the ashes to find an occassional match stick head size of gold.

When the mine was abandoned and the adits collapsed in 1956 several cases of dynamite were left in the mine along with some mining tools.

There were three small cabins at the mine. They were lived in by Jim Wilson, Bill Hall and Bill Williams who were bachelors who worked at the mine (O'Neil 1987).

Site: Rimmer Mine (24CA274)

Historical information: The mine lies within Homestead Patent #646284 dated August 24, 1918. The patent was filed by Siles P. Brown (GLO Records). Emmett Monroe, who ranched a few miles east of the site, said that Tom Rimmer lived at the mine and operated it during the 1920s. It was a small wagon mine selling coal locally (Monroe 1987). F. D. Osgood (Taylor 1932) states that a coal sample was taken 300 feet from the opening in 1921. Therefore, it is assumed that the mine at that time was at least 300 feet into the hillside. The thickness of the coal seam was 46 inches.

Site: Pierce Mine (24CA275)

Historical information: According to Bill Surmi, who worked at the mine, the Pierce Coal Company was owned by a group of investors. They opened the mine around 1920 and operated it until 1930. During this period of operation the mine employed around 42 men who worked during one shift. A spur railroad line ran to the mine where there were two tipples, one to load the railroad cars and the other to load trucks. The tipples were equipped with shakers and several screens.

Ventilation came from a large fan that was located outside the main tunnel. There was so much air coming into the mine that during the winter icicles were reported to have formed some distance inside the mine.

The method of mining was to have several tunnels with rooms off to the sides. For support, pillars of coal were left every few feet. A horse or mule was used to pull the coal car to the parting, which is where several tunnels converge at the main entrance tunnel. From here a motor hauled the coal to the tipple. The coal was mined with pick and shovel and was loaded by hand. About 400 tons per day was mined. The best coal was to the northeast of the adit. To the southeast the coal had more sulphur. Much of the coal was sold locally in Great Falls to businesses, schools and homes. Some of the coal was reported to have been shipped out of the area.

By 1928 the better quality coal was gone and the supports in the rooms were mined. This was called pulling or popping pillars. The pressure from the roof as it began to collapse would squeeze out the coal making it quite easy, but dangerous, to mine. Bill Surmi's father, who worked in the mine, was crushed and permanently disabled while popping a pillar.

In 1930 the mine was sold to a Mr. Brown who managed a Great Falls meat packing plant. He operated the mine for about one year, employing only a few miners. Then two men with the last names of Erebetta and Toulli took over the mine and ran it until 1932. They called it the Economy Mine. They mined, at most, only a few tons of coal a day.

Several years ago Otto Johnson, who owns the land, tore down the structures at the mine, collapsed the adit, spread out and partially covered the coal spoil with soil (Surmi 1987; Otto 1987).

Site: Keith Mine (24JT152)

Historical information: The mine was operated during the 1920s by Tom Keith who sold the coal locally. In the 1930s the local residents mined and hauled coal from the mine for their personal consumption. It was always a small wagon mine (Skite 1987).

Site: Nullimer Mine (24JT153)

Historical information: The mine was operated by Louis Nullimer during the 1920s and early 1930s. It was a small wagon mine which sold coal locally (Skites 1987).

Site: Nollar Mine (24JT154)

Historical information: The mine was opened in 1902 by Mr. Nollar* and was operated intermittently until the 1940s. When Fisher (1909) visited the mine in 1906 the entry extended 275 feet from the outcrop in a southwesterly direction. The entry was made so that it crossed the dip of the formation at an angle. By doing this the entry gradually rose, facilitating the drainage of water from the mine. There were two side entries at right angles to the main entry, one about 80 ft and the other about 200 ft from the face. The coal seam was four feet thick with no parting.

Apparently several different people operated the mine during its lifetime. Around 1920 Joe Armont leased the mine (Kolar 1976). Conrad Bodner (1987) remembered Nathen Savage as operating the mine in the 1930s. Vincent McAllister (1987) said two people by the names of Walker and Sextant were the last to operate the mine in the early 1940s. McAllister said that water became a problem. It has the most extensive underground workings of the local mines.

The coal was sold to the local communities of Geyser, Raynesford and Hughesville (McAllister 1987; Bodner 1987).

*[The U.S.G.S. The Arch, Mont. 7.5 quad spells Noller with an "e" and Fisher (1909) spells the name with an "a", i.e., Nollar.]

Site: McAllister Mine (24JT155)

Historical information: Fisher (1909) shows a prospect at the location of the site. Vincent McAllister (1987) said that only a prospect hole was present when his brother, Dick, started mining at the site in 1934. Dick McAllister worked the mine for a year or so. The coal seam pinched out so it was abandoned. A small amount of the coal was sold locally.

Site: McCarty Grade Mine (24JT156)

Historical information: The mines on the McCarty Grade opened up around 1910 by Joe Armont (Kolar 1976). Apparently these were the southern most adits (Mine 2 on sketch map). Around 1920 Pat McAllister opened up the northern most adits (Mine 1 on sketch map). The McAllister family mined the McCarty Grade mines until the late 1930s.

A brother of Vincent McAllister was blown-up while carrying powder from the powder magazine to the mine. He was smoking a cigar at the time and they attributed this as the cause of the explosion (McAllister 1987; Malmberg 1987).

The coal seam dips to the east which is down slope from the mine portal so a winch was used to haul the coal out of the mine.

Coal from these small mines was sold locally to the Raynesford and Geyser communities. It was also hauled over Horseshoe Bend in the Little Belt Mountains to Hughesville which was a mining town located about seven miles south of the site (Kolar 1976).

Site: Chambers Mine (24JT157)

Historical information: The mine was opened in 1903 by Jack Chambers and his brother. In 1906 the mine was visited by Fisher (1909) who noted the entry was 125 ft from the face. It was operated only during the winter months. The coal was in two seams, the lower being 14 inches thick and the upper 12 inches thick. A parting of slack material a little over four inches thick separated the seams (Fisher 1909). This mine was located on the east side of the coulee (i.e., either Adit 6 or Adit 7 on sketch map).

Around, or before 1920, Joe Armont opened two adits on the west side of the coulee (Kolar 1976). Pat McAllister and his two nephews, Richard (Dick) and Vincent (Slick) McAllister worked the mine beginning in the 1920s until it was shut down in 1937 (McAllister 1987).

The mining technique employed was to dig a main tunnel five to six-ft high and four to five-ft wide. This tunnel was timbered and extended a quarter of a mile, at the most, into the hillside. Then small rooms were dug into the coal seam. These rooms were not timbered and were the thickness of the coal seam. The coal carts were pushed out of the mine by hand to the tipple. After the coal was loaded it was weighed on a scale. The formation on the west side of the coulee dips to the east so the water in the mine drained out and no pumping was required (McAllister 1987).

Coal from the mine was sold to the Geyser community and the Raynesford community. Besides being used for domestic purposes, it was also used to fuel steam powered farm tractors (McAllister 1987).

Site: Miner Mine (24JT158)

Historical information: Coal was probably first mined on the site by Ray V. Miner who, in 1924 received a coal lease permit (Billings 023036) to mine coal in the N1/2 SE1/4 of Section 31. He apparently failed to develop the mine since the lease was cancelled in December of 1928 (GLO Records 1923-1928).

Gerald Hughes, who has lived a few miles south of the mines all his life, remembers a person named Boot Legger Charlie Taylor who mined at the site during the latter 1920s. The coal seam dipped several degrees away from the mine entrance requiring the coal cars to be pulled out with a cable attached to a capstan (Hughes 1987).

The mine was a small wagon mine selling coal locally.

## SUMMARY AND RECOMMENDATIONS

During the course of fieldwork and research for this report the following abandoned coal mines were examined, recorded, mapped and photographed: The Farrell-O'Neil (24CA273), Rimmer (24CA274, Pierce (24CA275), Keith (24JT152), Nullimer (24JT153), Nollar (24JT154), McAllister (24JT155), McCarty Grade (24JT156), Chambers (24JT157) and Miner (24JT158). Historic records for the mines were researched and local informants were interviewed. The site areas were examined for prehistoric cultural resources. None were found.

The majority of the 10 mines were operated during the 1920s to 1930s. The earliest mine was the Nollar which opened in 1902. The last mine to close was the Farrell-O'Neil which stopped operations in 1952. All except one mine (the Pierce) were small "wagon" mines employing about four or fewer men. Usually they operated only during the fall and winter months. The Pierce Mine, which had a railroad spur line to it, had two tipples for loading both trains and trucks. The mine employed as many as 42 miners who mined around 400 tons of coal per day. This fairly large mine, like the small ones, had similiar markets for the coal. None sold coal to smoke stack industries but rather to schools, businesses, and homes for heating. The use of this local resource benefited the local economies by providing jobs and recirculating the profits within the local business community.

A fairly common theme was the bachelor miner who lived at the mine. At the Farrell-O'Neil mine the three bachelor miners lived in separate cabins but worked together. At the nearby Rimmer mine, Tommy Rimmer lived with his dog and worked the mine by himself. While interviewing the local citizens about the Rimmer mine most knew very little about the mine but remembered Tommy Rimmer quite clearly. Each had a story to tell about how he would come to town with his dog for a drink or two. His dog could perform numerous tricks and as the evening wore on Tommy and his dog would dance. Similiar colorful stories were told of Bootlegger Charlie Taylor who lived by himself at the Miner Mine.

Another type of mining operation was the family owned and operated mine. Often, like the bachelor miners the family lived at the mine.

The exception to the mines in this project was the company-owned Pierce Mine produced more coal in a day than most of the smaller ones did in a year.

Virtually none of the original structures remain at the mines. All that remains are remnants of tipples and coal spoil. With the removal of the structures, the sites have been sufficiently altered from their original appearance, with a subsequent loss of physical integrity, and thus are not recommended as eligible for listing on the NRHP.

Table 3. Summary of inventory data for the coal mines recorded on this project.

| Site Name | Site Number | Dates of Operation | Major Historic Theme | Site Condition | Description and Comments |
|---|---|---|---|---|---|
| Farrell-O'Neil | 24CA273 | 1923-1952 | wagon mine to supply coal to the Fairfield, Augusta, Great Falls, and Helena communities | only the coal spoil dumps, footings for tipples and weigh scale foundation remains | Richard Farrell filed for a federal coal lease in 1923. In 1933 Joseph O'Neil, E.M. Smith and Walter Woodrow filed for a federal coal lease on adjacent property. In 1937 Joseph O'Neil acquired the lease from Farrell. |
| Rimmer | 24CA274 | 1920s | wagon mine to supply coal to the local communities | only the coal spoil dumps and footings for tipples remain | Tom Rimmer operated the mine by himself and he lived at the mine. |
| Pierce | 24CA275 | 1920s-1932 | fairly large commercial mine which supplied coal primarily to the Great Falls community | only coal spoil, a collapsed air shaft and a large area of ground subsidence remains | Pierce Coal Co. started the mine around 1920 and employed up to 42 miners with as much as 400 tons of coal mined per day. By 1928 most of the good coal was exhausted. The mine closed in 1932. |
| Keith | 24JT152 | 1920s & 1930s | wagon mine which supplied coal for the Raynesford community | only the coal spoil dumps and footings for tipple remain | The mine was operated by Tom Keith. In the 1930s local ranchers mined coal for their own needs. |
| Nullimer | 24JT153 | 1920s & 1930s | wagon mine which supplied coal for the Raynesford community | only the coal spoil dumps and footings for tipple remain | Louis Nullimer operated the mine during the 1920s and 1930s |

Table 3. Summary of inventory data for the coal mines recorded on this project. (continued)

| Site Name | Site Number | Dates of Operation | Major Historic Theme | Site Condition | Description and Comments |
|---|---|---|---|---|---|
| Nollar | 24JT154 | 1902-1940s | this wagon mine supplied coal for the Geyser, Raynesford and Hughesville communities | only the coal spoil dumps and part of a tipple remain | This mine has the most extensive underground workings of the local mines because it was operated for such a long period of time. The four-foot thick seam of coal probably was the thickest of the area mines. |
| McAllister | 24JT155 | 1934-1936 | this small wagon mine supplied coal to the Raynesford and Geyser communities | only a coal spoil dump remains | A prospect hole was placed at the mine around 1906. In 1934 Dick McAllister started actual mining at the site. |
| McCarty Grade | 24JT156 | circa 1910-late 1930s | wagon mine to supply coal to the Geyser, Raynesford and Hughesville communities | only coal spoil dumps and footings for tipples remain | The site was mined by Joe Armont and the McAllister's. The tragedy of one of the McAllister brothers being blown-up is an example of the dangers that were part of these early mining operations. |

Table 3. Summary of inventory data for the coal mines recorded on this project. (continued)

| Site Name | Site Number | Dates of Operation | Major Historic Theme | Site Condition | Description and Comments |
|---|---|---|---|---|---|
| Chambers | 24JT157 | 1903-1937 | wagon mine to supply coal to the Geyser and Raynesford communities | only coal spoil dumps and footings for tipples remain | The site was opened up by the Chamber brothers. Later Joe Armont operated the mine. It was last operated by the McAllister family. The house at the mine is a fairly common part of wagon mines where the family who operated the mine also lived on the site. |
| Miner | 24JT158 | 1920s | wagon mine to supply coal to the Stanford community | only coal spoil dumps and footings for tipples remain | The miners at this mine, and also the Brown mine, are an example of another facet of these small mines. At this site the miner lived and worked the mine by himself. They often garnished a reputation of being characters, adding to the local community's cast of colorful people. At this mine it was Bootlegger Charlie Taylor and at the Rimmer Mine it was Tommy Rimmer. |

## REFERENCES CITED

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Bodner, Conrad
1987 Personal communication, March 10, southeast of Raynesford, Montana.

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1981 Stone Age to Space Age in 100 Years - Cascade County History and Gazetteer. Cascade County Historical Society, Great Falls.

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1973 "Coal: Montana's Prosaic Treasure", Montana: The Magazine of Western History 23(4): 18-31.

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Kolar, Jilia Armont
1976 In Furrows and Trails in Judith Basin. (no publisher)

Malmberg, Lawrence
1987 Personal communication, April 8, Geyser, Montana.

McAllister, John
1987 Personal communication, April 30, Great Falls, Montana.

McAllister, Vincent
1987 Personal communcation, April 8, Geyser, Montana.

Monroe, Emmett
1987 Personal communication, March 9, Cascade, Montana.

Montana Fish and Game Commission
1975 Montana Historic Preservation Plan with Historic Sites Compendium. Recreation and Parks Division, Montana Department of Fish and Game, Helena.

Morgan, Thomas
1966 History of Coal Mining in Montana. Proceedings of the First Montana Coal Resources Symposium. Montana Bureau of Mines and Geology, Special Publication 36. Butte, Montana.

O'Neil, Robert
1987 Personal communcation, May 1, Cascade, Montana.

Payne, Gene F.
1973 Vegetative Rangeland type in Montana. Montana Agricultural Experiment Station, Montana State University, Bozeman.

Silverman, Arnold J. and William L. Harris
1967 Stratigraphy and Economic Geology of the Great Falls - Lewistown Coal Field, Central Montana. Montana Bureau of Mines and Geology, Bulletin 56. Butte, Montana.

Skite, Frank
1987 Personal communcation, March 10, east of Raynesford, Montana.

Stober, Eva Lesell
1979 Belt Valley History - 1877-1979. Advanced Litho Printing. Great Falls, Montana.

# APPENDIX A:

## Site Forms

| DSL Designation | Historic Designation | Smithsonian Number |
|---|---|---|
| Four Corners | Farrell-O'Neil | 24CA273 |
| Four Corners | Rimmer | 24CA274 |
| No Name | Pierce | 24CA275 |
| Raynesford A | Keith | 24JT152 |
| Raynesford A | Nullimer | 24JT153 |
| Noller | Nollar | 24JT154 |
| Raynesford B | McAllister | 24JT155 |
| Raynesford C | McCarty Grade | 24JT156 |
| Raynesford D | Chambers | 24JT157 |
| Miner | Miner | 24JT158 |

# MONTANA CULTURAL RESOURCE INVENTORY

## Form No. 1 Locational Information

1.1 Site number:
24CA273

1.2 Site name/field designation:
Farrell - O'Neil Mine

1.3 County:
Cascade

1.4 Township/range:

T 19N R 2W SE 1/4 SW 1/4 NW 1/4 of Section 20

1.5 UTM:
Mines area 2:
Zone 12 432 500 Easting 5248000 Northing

1.6 Site type:
coal mine

1.7 Recording status & comments:
Photographed, mapped and recorded

1.8 Administrative/surface ownership:

Nancy Deer
Great Falls, MT

1.9 Mineral ownership:
federal

1.10 Project name:
Department of State Lands
Abandoned Mine Reclamation
Program

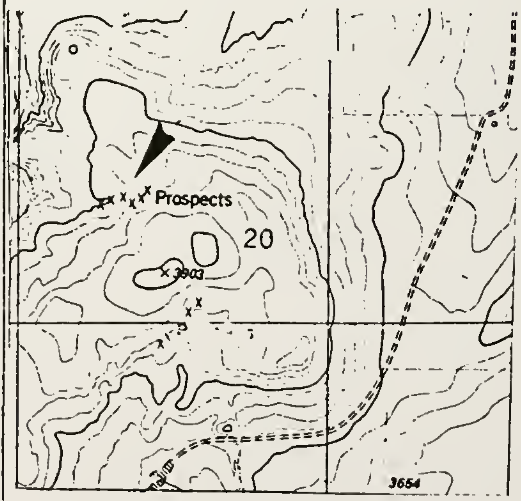
1.11 General narrative description of site:

The site consists of the remains of a small coal mine near the top of a north-facing hill. Six adit openings and coal waste dumps are all that remain of the mining operation. The mine, which is about one-half mile north of the Rimmer Mine, was in operation from some time during the 1920s to the mid-1950s.

1.12 Map reference:
USGS Simms, Mont. 7.5 Min Quad (1983)

1.13 City/town: ☒ vicinity of
Simms, Montana

1.14 Access to site:
Drive south out of Simms on a gravel road for 7-3/4 miles. Here is a cross road on Birdtail Creek. Turn west and drive for one mile. The site is on the end of a finger ridge southeast of the road. It is one-half of a mile from the road.



MONTANA CULTURAL RESOURCE INVENTORY

Form No. 2. Environmental Setting

Site number: 24CA273

| | |
|---|---|
| 2.1 Geographic setting: | 2.2 Elevation: 1158 m 3800 ft.<br>1176 to 3860 |

General: The site is on the edge of the foothills that borders this part of the Rocky Mountain front range.
Local: The site is near the top of a northeast/southwest trending finger ridge.

2.3 View/aspect:
The view is limited to the northwest and this is for 1 km and less.

| | |
|---|---|
| 2.4 Major drainage:<br>Birdtail Creek | 2.5 Minor drainage(s): |

2.6 Water sources:

| | Names | Distance | Ele. Change | Type & seasonality |
|---|---|---|---|---|
| a. | Birdtail Creek | .7 km | 48 m | intermittent |
| b. | | | | |

2.7 Regional vegetation:
Teton River - Judith Basin Grassland (Payne 1973)

2.8 Local vegetation:
blue grama, needle-and-thread, western wheatgrass, prairie junegrass, needleleaf sage, ponderosa pine, juniper, limber pine, and chokecherry

2.9 Soils:
brown loam

2.10 Surface visibility/season of survey:

good/early spring

2.11 Other environmental factors pertaining to site location:
The site is 12 miles west of the Great Falls coal field. The coal comes from the Eagle Formation instead of the Morrison formation as in the Great Falls coal field.

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 3 Site Assessment and Recording Documentation

Site number: 24CA273

3.1 Condition of site: Destroyed.

3.2 Site significance (NRHP):
The site is one of many small coal mines in the area that played an important role in the development of the local economy at the turn of this century. Without the tipples and other structures the site has lost its capacity to convey the physical characteristics it possessed in the past. The site is not recommended as eligible for listing on the NRHP.

☐ Attachments:

3.3 Impacts:
The Department of State Lands plans to close the mine opening, and either reclaim or remove coal waste areas.

3.4 Recommendations:
The site has been recorded, mapped and photographed and no further work on the site is recommended.

| | | |
|---|---|---|
| 3.5 Site located by:<br>Gene Munson<br>Date: 3/9/87 | 3.6 Site recorded by:<br>Gene Munson<br>Date: 3/9/87 | 3.7 Revisions by:<br>Date: |

3.8 Permit No.: NA

3.9 Publications concerning site:
Government Land Office Records 1923-1954 U.S. Department of Interior, Geologic Survey, coal mine serial pages. Bureau of Land Management, Billings.
Munson, Gene 1987 Cultural resource inventory and evaluation of selected coal mines in the Great Falls coal field. For the Montana Department of State Lands. GCM Services, Inc., Butte.
Payne, Gene F. 1973 Vegetative Rangeland Type in Montana. Montana Agricultural Experiment Station, Montana State University, Bozeman.

| | |
|---|---|
| 3.10 Artifact repository:<br>NA | 3.11 Field notes/maps/photo repository:<br>GCM Services, Inc.<br>1003 S. Montana St.<br>Butte, MT 59702 |

3.12 Photos & accession No:

| No. | Description | View |
|---|---|---|
| 17 | overview | E |
| 18 | scales | N |

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 5. Description of Historic Sites

Site number: 24CA273

---

5.1 Site dimensions, how determined:
The site measures 100 m north/south x 250 m east/west. This is the area where the features and artifacts are located.

25,000 m2

---

5.2 Features:
See attached.

---

5.3 Artifacts (observed, collected):
Artifacts consist of bed parts, stove parts, bottles, corragated tin, an automobile, mine car rail, mine cars, a five gallon motor oil can, a slip, and a "hoist drum". The bed parts and stove remains are located at Feature 5. The bottles and corragated tin are scattered around the site. The automobile is a Dodge (c. 1930) and is located at Mine 1. There are remains of three mine cars and they are at Mines 1 and 6. The 8 lb mine rails are at Mine 1. Mine 3 has the remains of a mine rail using wooden 2 x 4's with 3/4 inch iron flat bars for the coal carts to run upon. The five gallon motor oil can has "H. Earl Clark Co. Heccolene Motor Oil" written on it. The slip is a small horse-drawn earth moving device. The "hoist drum" is a curious looking shop-made device. It consists of a 10 gallon hot water tank with an automobile drive shaft placed lengthwise through the center of the tank and then filled with concrete.

---

5.4 Historical information and evaluation:
The site is within Stock Raising Homestead Patent #1078323 dated September 17, 1935. The patent was filed by John J. Farrell (GLO Records). The coal is owned by the federal government. Richard H. Farrell in 1923 filed for a federal coal lease and subsequently received Great Falls 053242 (GLO Records). This lease was for 40 acres in the NW1/4 SW1/4 of Section 20. The application was protested by E. R. Jones, Simms, Montana on the grounds of superior equities. The GLO records do not state specifically what the superior equities were but it is probable that Jones was already mining at the site. In 1933 E. Ford, E. M. Smith, Joseph O'Neil and Walter Woodrow received federal coal lease Great Falls 079140 for the SW1/4 NW1/4 of Section 20 (GLO Records). In 1937 Joseph O'Neil was assigned coal lease Great Falls 053242 and surrendered it in 1949. Coal lease Great Falls 079140 was reliquished in 1954. The 1952 inspectors map of the mine shows only four adit entries (see attached map). It is assumed that the other two mine entries observed during the current field inspection were made after 1952. (Continued)

---

5.5 References
(See Section 3.9)

O'Neil, Robert 1987 Personal communication May 1, Cascade, Montana

---

5.6 Subsurface testing, results, methods, etc.: None

5.2 Features: (continued) Site No.: 24CA273

The features are placed into two categories: the adits and associated coal spoils; and the features not associated with any particular adit (see sketch map).

Adit 1 consists of a collapsed mine adit, the remains of a shed roof that covered the trench to the adit, and a moderately sized pile of coal spoil. The coal spoil is currently burning.

Adit 2 consists of an open adit and a moderately sized pile of coal spoil.

Adit 3 consists of a collapsed adit, moderately sized pile of coal spoil and the remains of a tipple.

Adit 4 consists of a collapsed adit, two relatively small piles of coal spoil and what may be the remains of a water drain. The "drain" consists of posts set upright into the ground with boards nailed horizontally to the posts. The drain is about one foot in width and 30 ft in length. It passes through a low pile of coal spoil.

Adit 5 consists of a collapsed adit and a relatively long and narrow pile of coal spoil.

Adit 6 consists of a collapsed adit. The remains of the roof that covered the trench to the mine, and a relatively long and narrow pile of coal.

Feature 1 is the remains of a house that was burnt to the ground. The house measured approxiamtely 12 ft north/south x 10 ft east/west. The remains of two wood cookstoves, a bed, cooking utensils, etc., are located among the rubble.

Feature 2 is the remains of a coal weighing scale. The scale is comparable to that found at a large commercial mine with a concrete pit measuring 18 ft north/south x 10 ft east/west. The plank platform is still fairly intact.

### 5.4 Historical information and evaluation (continued)

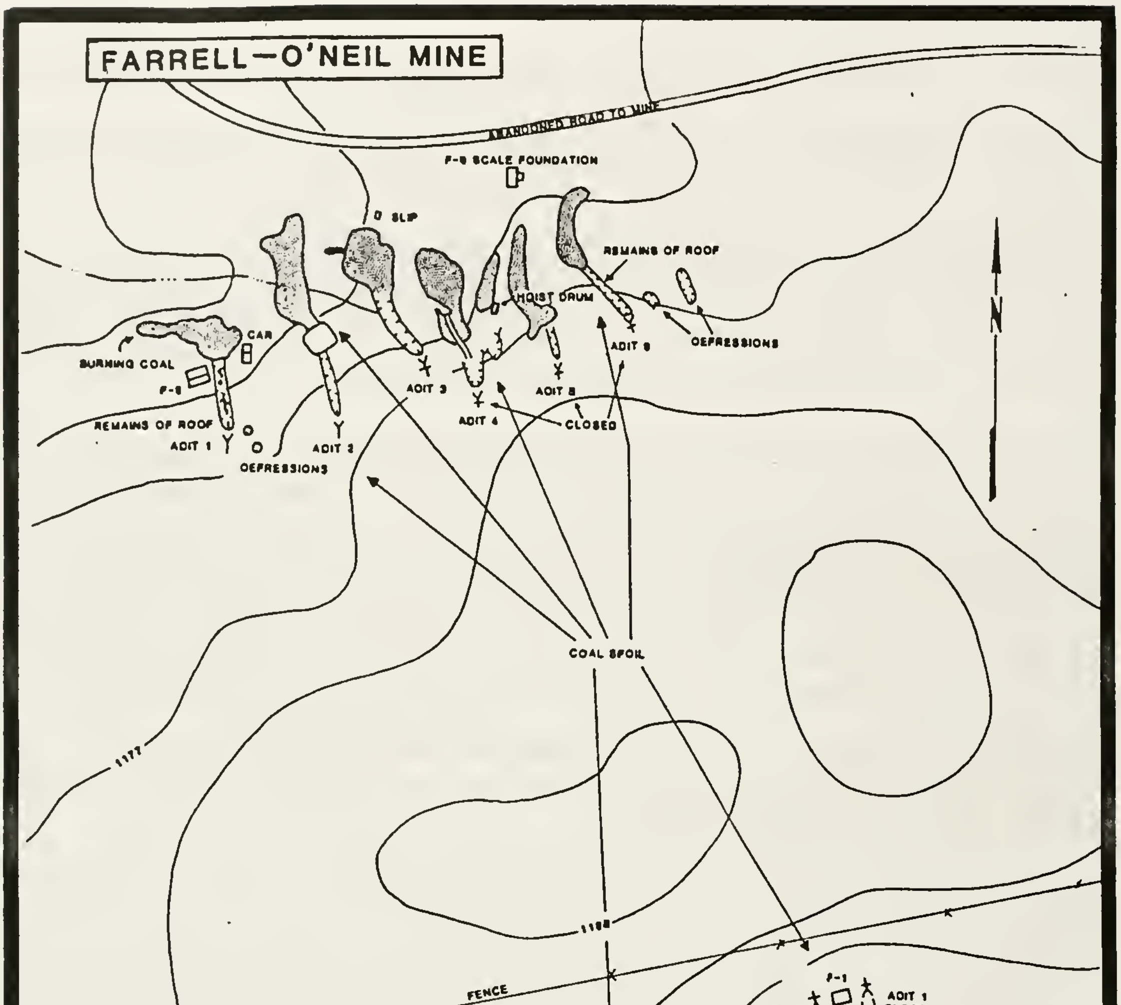
Site No.: 24CA273

According to Robert O'Neil (Joseph O'Neil's son) the underground workings in the mine were around 5.5 feet high even though the coal seam including partings was only 44 inches thick. The reason the extra foot or so of the ground above the coal seam was taken out was to make it easier to get around in the mine. There were three seams of coal. The bottom seam measured 16 inches thick with a six inch parting then an 10 inch coal seam with a four inch parting and then an eight inch coal seam. The mine tunnels were timbered every four feet. The 1000 pound coal cars were pushed out of the mine by hand.

The coal was sold to the communities of Fairfield, Augusta, Great Falls and Helena. Customers liked the coal because it burned hot and had very little sulphur. However, it did leave a lot of ash. Some of the customers would shift through the ashes to find an occassional match stick head size of gold.

When the mine was abandoned and the adits collapsed in 1956 several cases of dynamite were left in the mine along with some mining tools.

There were three small cabins at the mine. They were lived in by Jim Wilson, Bill Hall and Bill Williams who were bachelors that worked at the mine (O'Neil 1987).


FARRELL—O'NEIL MINE
ABANDONED ROAD TO MINE
F-5 SCALE FOUNDATION
D SLIP
REMAINS OF ROOF
HOIST DRUM
DEPRESSIONS
CAR
BURNING COAL
F-6
ADIT 3
ADIT 4
ADIT 5
ADIT 6
CLOSED
REMAINS OF ROOF
ADIT 1
ADIT 2
DEPRESSIONS
N
COAL SPOIL
1177
1189
1183
1177
FENCE
F-1
ADIT 2
ADIT 1
CLOSED
TIPPLE REMAINS
RIMMER MINE
F-3
F-2 SCALE FOUNDATION
ADIT 3
CLOSED
F-4
TRAIL
66.4 m

Overview of Farrell-O'Neil mine (view to east)

## MONTANA CULTURAL RESOURCE INVENTORY

### Form No. 1 Locational Information

| | | |
|---|---|---|
| 1.1 Site number:<br>24CA274 | 1.2 Site name/field designation:<br>Rimmer Mine | 1.3 County:<br>Cascade |

1.4 Township/range:

T 19N R 2W SW 1/4 NE 1/4 SW 1/4 of Section 20

1.5 UTM:

Zone 12 432 300 Easting 5248400 Northing

| | |
|---|---|
| 1.6 Site type:<br>coal mine | 1.7 Recording status & comments:<br>Photographed, mapped and recorded |

| | |
|---|---|
| 1.8 Administrative/surface ownership:<br>Nancy Deer<br>Great Falls, MT | 1.9 Mineral ownership: |
| | 1.10 Project name:<br>Department of State Lands Abandoned Mine Reclamation Program |

1.11 General narrative description of site:

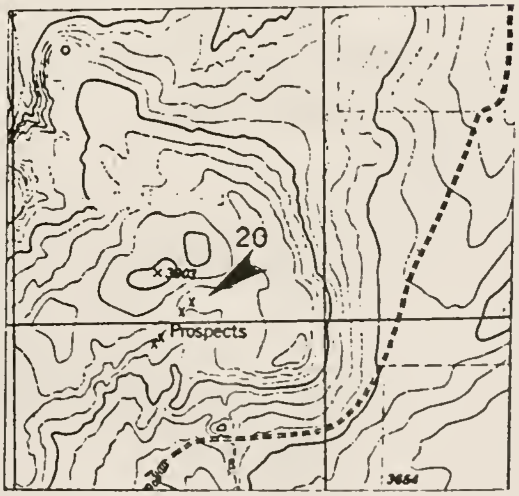
The site is located on the south side of a hill near its top. It consists of three collapsed mine adits and associated coal spoil dumps. There are no standing structures. The site is .4 km south of the Farrel - O'Neil Mine. The mine operated during the 1920s and sold its coal to local area residents.

1.12 Map reference:
USGS Simms, Mont. 7.5 Min. Quad (1983)

1.13 City/town: ☒ vicinity of
Simms, Montana

1.14 Access to site:

Drive south out of Simms on a gravel road for 7-1/4 miles. Here is a cross road on Birdtail Creek. Turn west and drive for one mile. The site is on the end of a finger ridge southeast of the road. It is one-half of a mile from the road.



MONTANA CULTURAL RESOURCE INVENTORY

Form No. 2. Environmental Setting

Site number: 24CA274

2.1 Geographic setting:

2.2 Elevation: 1176 m 3860 ft.

General: The site is on the edge of the foothills that borders this part of the Rocky Mountain front range.
Local: The site is near the top of a northeast/southwest trending finger ridge.

2.3 View/aspect:
The maximum view is to the west and southwest. This is for several kilometers.

2.4 Major drainage:
Birdtail Creek

2.5 Minor drainage(s):

2.6 Water sources:

| | Names | Distance | Ele. Change | Type & seasonality |
|---|---|---|---|---|
| a. | Birdtail Creek | .9 km | 48 m | intermittent |
| b. | | | | |

2.7 Regional vegetation:
Teton River - Judith Basin grassland (Payne 1973)

2.8 Local vegetation:
blue grama, needle-and-thread, western wheatgrass, prairie junegrass, needleleaf sage, ponderosa pine, juniper, limber pine, and chokecherry

2.9 Soils:
brown loam

2.10 Surface visibility/season of survey:
good/early spring

2.11 Other environmental factors pertaining to site location:
The site is 12 miles west of the Great Falls coal field. The coal comes from the Eagle formation instead of the Morrison formation as in the Great Falls coal field.

## MONTANA CULTURAL RESOURCE INVENTORY

### Form No. 3 Site Assessment and Recording Documentation

Site number: 24CA274

3.1 Condition of site: Destroyed.

---

3.2 Site significance (NRHP):

The site is one of many small coal mines in the area that played an important role in the development of the local economy at the turn of this century. Without the tipples and other structures the site has losts its capacity to convey the physical characteristics it possessed in the past. The site is not recommended as eligible for listing on the NRHP.

☐ Attachments:

---

3.3 Impacts:

The Department of State Lands plans to close the mine opening, and either reclaim or remove coal waste areas.

---

3.4 Recommendations:

The site has been recorded, mapped and photographed and no further work on the site is recommended.

| | | |
|---|---|---|
| 3.5 Site located by:<br>Gene Munson<br>Date: 3/9/87 | 3.6 Site recorded by:<br>Gene Munson<br>Date: 3/9/87 | 3.7 Revisions by:<br><br>Date: |

3.8 Permit No.: N/A

---

3.9 Publications concerning site:

Government Land Office Records 1918 U.S. Department of Interior, Patent Records, Bureau of Land Management, Billings.

Munson, Gene 1987 Cultural resource inventory and evaluation of selected coal mines in the Great Falls coal field. For the Montana Department of State Lands. GCM Services, Inc., Butte.

Osgood, F.D. (compiler) 1932 Description of mine samples. In Analysis of Montana Coals. United States Department of Commerce Bureau of Mines Technical Paper 529 pp 62-124.

Payne, Gene F. 1973 Vegetative Rangeland Type in Montana. Montana Agricultural Experiment Station, Montana State University, Bozeman.

Turner, Scott (director) 1932 Analyses of Montana Coals. U.S. Bureau of Mines, Technical Paper 529.

| | |
|---|---|
| 3.10 Artifact repository:<br><br>NA | 3.11 Field notes/maps/photo repository:<br>GCM Services, Inc.<br>1003 S. Montana St.<br>Butte, MT 59702 |

3.12 Photos & accession No:

| No. | Description | View |
|---|---|---|
| 16 | overview | W |

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 5. Description of Historic Sites

Site number: 24CA274

5.1 Site dimensions, how determined:
The site measures 80 m N/S x 180 m E/W. This is the area in which the features are located.

14,400 $m^2$

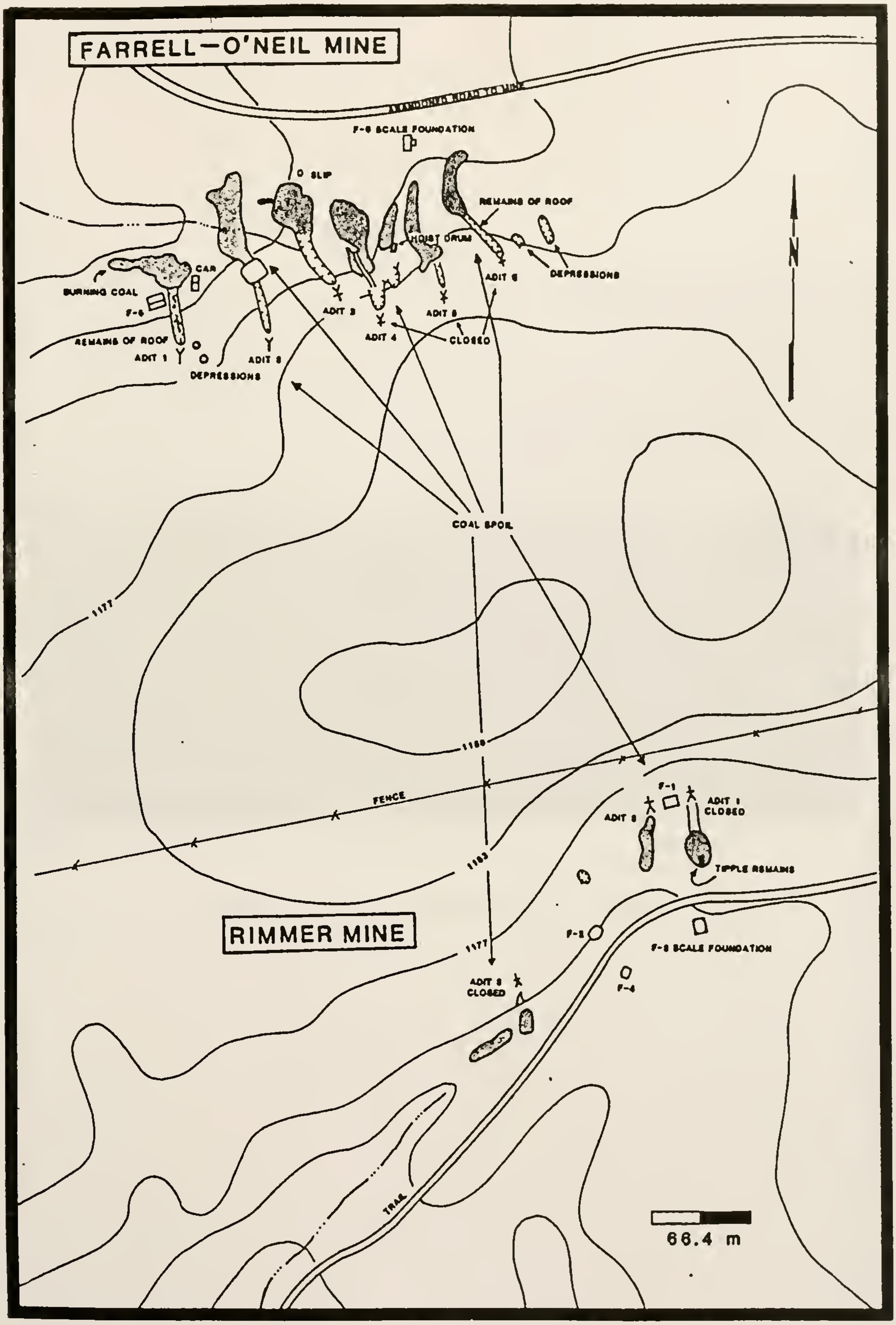
5.2 Features:
The features are placed into two categories: the adits and associated coal spoils; and the features not associated with any particular adit (see sketch map).
Adit 1 consists of a collapsed adit, remains of a tipple and a pile of coal spoil.
Adit 2 consists of a collapsed adit, and a pile of coal spoil.
Adit 3 consists of a collapsed adit and a pile of coal spoil.
Feature 1 is a 10 ft N/S x 12 ft E/W leveled-off place on the hillside. There are the remains of a foundation made of sandstone rubble. The feature is located between mines 1 and 2.
Feature 2 is a 12 ft N/S x 10 ft E/W x 2 ft deep rectangular hole in the ground. At each corner is a concrete footing for a platform scale.
Feature 3 is a 12 ft N/S x 12 ft E/W leveled-off place surrounded by tar paper nails, glass fragments and nails. A building probably was located at Feature 3.
Feature 4 is a small pile of coal ash and clinker.

5.3 Artifacts (observed, collected):
Artifacts consists of mine car parts, mine car rail, bed parts, stove parts, cable, a license plate and automobile parts. The cable, stove parts, and automobile parts are located at Mine 2. The 1936 license plate is located at Feature 2. The mine car parts and rail are located at Mine 1.

5.4 Historical information and evaluation:
The mine lies within Homestead Patent #646284 dated August 24, 1918. The patent was filed by Siles P. Brown (GLO Records). Emmett Monroe, who ranched a few miles east of the site, said that Tom Rimmer lived at the mine and operated it during the 1920s. It was a small wagon mine selling coal locally (Monroe 1987). F. D. Osgood (Taylor 1932) states that a coal sample was taken 300 feet from the opening in 1921. Therefore, it is assumed that the mine at that time was at least 300 feet into the hillside. The thickness of the coal seam was 46 inches.

5.5 References
(See Section 3.9)
Monroe, Emmett 1987 Personal communication, March 9, Cascade, Montana.

5.6 Subsurface testing, results, methods, etc.
None


FARRELL—O'NEIL MINE
F-6 SCALE FOUNDATION
O SLIP
REMAINS OF ROOF
HOIST DRUM
DEPRESSIONS
ADIT 6
CAR
BURNING COAL
F-5
REMAINS OF ROOF
ADIT 1
ADIT 2
DEPRESSIONS
ADIT 3
ADIT 4
ADIT 5
CLOSED
N
COAL SPOIL
1177
1180
FENCE
1183
F-1
ADIT 1
CLOSED
ADIT 2
TIPPLE REMAINS
RIMMER MINE
F-2
F-3 SCALE FOUNDATION
1177
ADIT 3
CLOSED
F-4
TRAIL
66.4 m

Overview of Rimmer Mine (view west).

# MONTANA CULTURAL RESOURCE INVENTORY

## Form No. 1 Locational Information

| | | |
|---|---|---|
| 1.1 Site number:<br>24CA275 | 1.2 Site name/field designation:<br>Pierce Mine | 1.3 County:<br>Cascade |

1.4 Township/range:

| | | | | |
|---|---|---|---|---|
| T20N | R5E | SW 1/4 | SW 1/4 | SW 1/4 of Section 32 |
| T19N | R5E | NW 1/4 | NW 1/4 | NW 1/4 of Section 5 |

1.5 UTM:

Zone 12 489 880 Easting 5253 380 Northing

| | |
|---|---|
| 1.6 Site type:<br>coal mine | 1.7 Recording status & comments:<br>Photographed, mapped and recorded |

1.8 Administrative/surface ownership:

Otto Johnson
southeast of Great Falls, MT

1.9 Mineral ownership:

1.10 Project name:
Department of State Lands
Abandoned Mine Reclamation
Program

1.11 General narrative description of site:

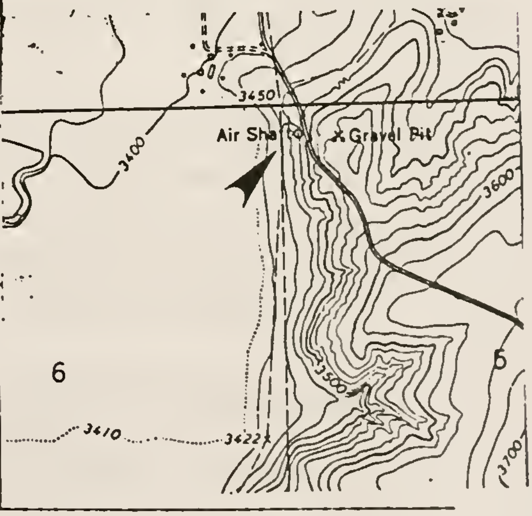
The site consists of the remains of a coal mine including: a collapsed air shaft, a depression that may be the result of an entry collapsing and a fairly large area of ground subsidence.

During its period of operation from 1920 to 1930, the mine was a large, commercial coal mine.

1.12 Map reference:
USGS Southeast Great Falls, Mont. 7.5 min quad
(1975)

1.13 City/town: ☒ vicinity of
Great Falls, MT

1.14 Access to site:
Drive east out of Great Falls on U.S. Highway 87 for three miles. Turn south on Highway 227 and drive for 2-3/4 miles. Turn east onto a gravel road and follow it for 1/2 mile to a junction. Turn south for a little over 1/4 mile. Here the road passes through the site.



MONTANA CULTURAL RESOURCE INVENTORY

Form No. 2. Environmental Setting

Site number: 24CA275

| | |
|---|---|
| 2.1 Geographic setting: | 2.2 Elevation: 1060 m 3480 ft. |

General: The site is on the northern edge of the Little Belt Mountain foothills.
Local: The site is on the west face of a ravine that is drained by Sand Coulee Creek

2.3 View/aspect:
The view is limited to the west into the Sand Coulee drainage. This is for several kilometers.

| | |
|---|---|
| 2.4 Major drainage:<br>Sand Coulee Creek | 2.5 Minor drainage(s): |

2.6 Water sources:

| | Names | Distance | Ele. Change | Type & seasonality |
|---|---|---|---|---|
| a. | Sand Coulee Creek | .6 km | 30 m | intermittent |
| b. | | | | |

2.7 Regional vegetation:
Teton River - Judith Basin grassland

2.8 Local vegetation:
blue grama, and western wheatgrass

2.9 Soils:
light brown loam

2.10 Surface visibility/season of survey:
good/early spring

2.11 Other environmental factors pertaining to site location:

The site is in the north central portion of the coal mine.

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 3 Site Assessment and Recording Documentation

Site number: 24CA275

3.1 Condition of site: Destroyed.

3.2 Site significance (NRHP):
The mine produced a fair amount of coal contributing to the development of the Great Falls community. However, none of the structures remain and past reclamation work has almost obliterated any indications that a coal mine once was located at the site. The site is not recommended as eligible for listing on the NRHP.

☐ Attachments:

3.3 Impacts:
The Department of State Lands plans to reduce any hazards that may remain at the site (e.g., finish filling in the vent shaft).

3.4 Recommendations:
The site has been recorded, mapped and photographed and no further work on the site is recommended.

| | | |
|---|---|---|
| 3.5 Site located by:<br>Gene Munson<br>Date: 3/9/87 | 3.6 Site recorded by:<br>Gene Munson<br>Date: 3/9/87 | 3.7 Revisions by:<br>Date: |

3.8 Permit No.: NA

3.9 Publications concerning site:

Munson, Gene 1987 Cultural resource inventory and evaluation of selected coal mines in the Great Falls coal field. For the Montana Department of State Lands. GCM Services, Inc., Butte.

Payne, Gene F. 1973 Vegetative Rangeland Type in Montana. Montana Agricultural Experiment Station, Montana State University, Bozeman.

| | |
|---|---|
| 3.10 Artifact repository:<br>NA | 3.11 Field notes/maps/photo repository:<br>GCM Services, Inc.<br>1003 S. Montana St.<br>Butte, MT 59702 |

3.12 Photos & accession No:

| No. | Description | View |
|---|---|---|
| 20 | vent shaft | N |
| 21 | overview | S |
| 22 | overview of subsidence | E |

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 5. Description of Historic Sites

Site number: 24CA275

5.1 Site dimensions, how determined:
The site measures 210 m NE/SW x 60 m NW/SE. This is the area in which the vent shaft and ground subsidence are located.

12,600 m$^2$

5.2 Features:
The features consist of a collapsed vent shaft, a nearby subsidence hole and a fairly large area of ground subsidence. The depression at the collapsed vent shaft is about 4 m in diameter and 1.5 deep. Fencing debris, etc., has been dumped into the depression.

5.3 Artifacts (observed, collected):
No artifacts were observed at the site.

5.4 Historical information and evaluation:
According to Bill Surmi, who worked at the mine, the Pierce Coal Company was owned by a group of investors. They opened the mine around 1920 and operated it until 1930. During this period of operation the mine employed around 42 men who worked during one shift. A spur railroad line ran to the mine where there were two tipples, one to load the railroad cars and the other to load trucks. The tipples were equipped with shakers and several screens.

Ventilation came from a large fan that was located outside the main tunnel. There was so much air coming into the mine that during the winter icicles were reported to have formed some distance in the mine.

The method of mining was to have several tunnels with rooms off to the sides. For support, pillars of coal were left every few feet. A horse or mule was used to pull the coal car to the parting, which is where several tunnels converge at the main entrance tunnel. From here a motor hauled the coal to the tipple. The coal was mined with pick and shovel and was loaded by hand. About 400 tons per day was mined. The best coal was to the northeast of the adit. To the southeast the coal had more sulphur. Much of the coal was sold locally in Great Falls to businesses, schools, and homes. Some of it may have been shipped out of the area. (continued.

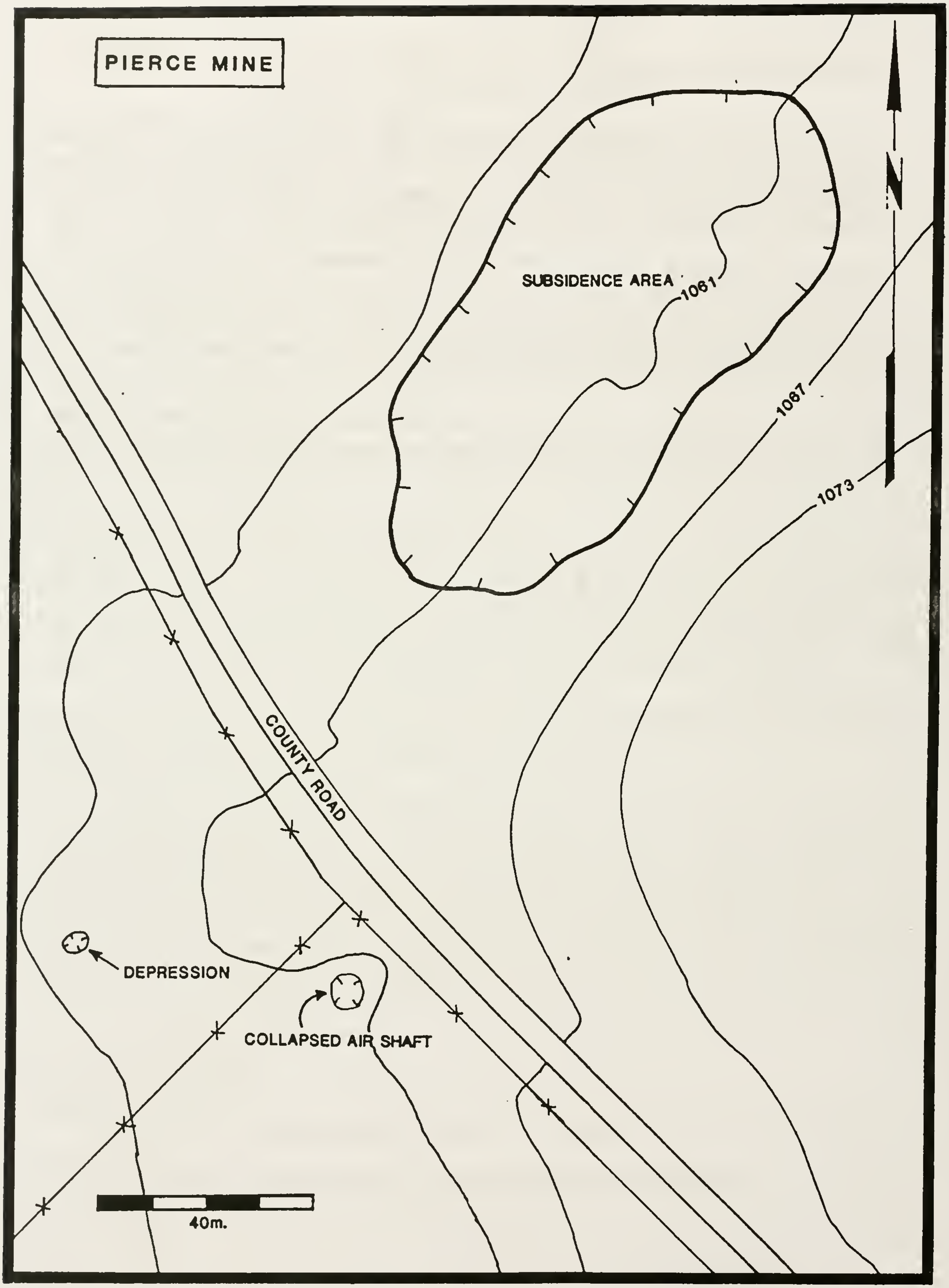
5.5 References
(See Section 3.9)
Johnson, Otto
1987 Personal communication, March 9, southeast of Great Falls, Montana.
Surmi, Bill
1987 Personal communication, May 5, Sand Coulee, Montana.

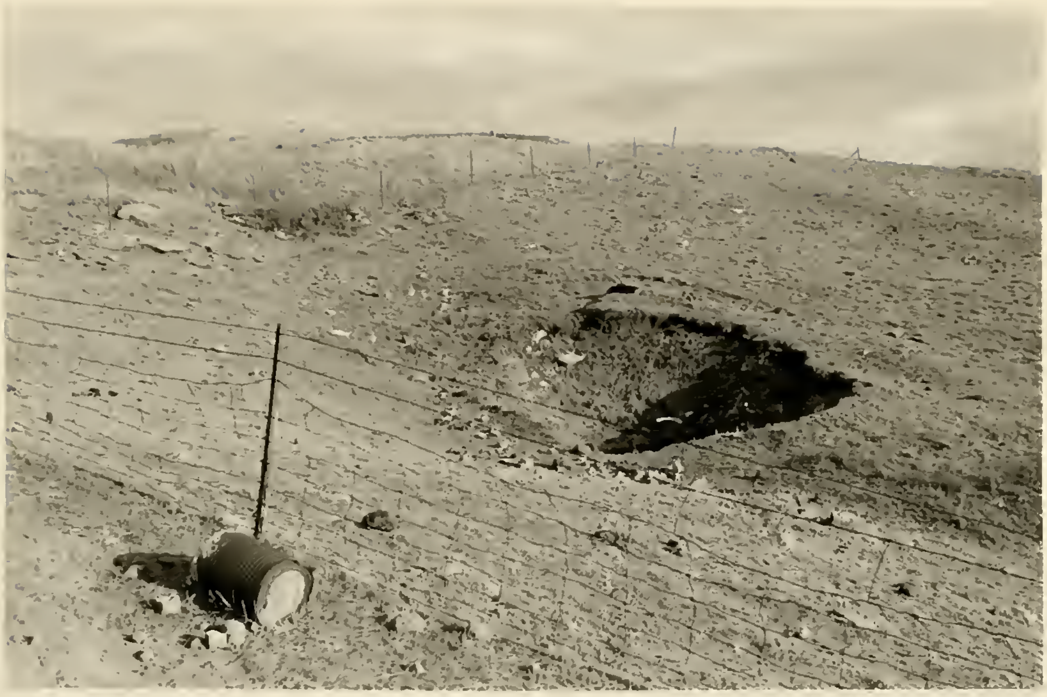
5.6 Subsurface testing, results, methods, etc.
None

By 1928 the good quality coal was gone and the supports in the rooms were mined. This was called pulling or popping pillars. The pressure from the roof as it began to collapse would squeeze out the coal making it quite easy but dangerous to mine. Bill Surmi's father, who worked in the mine, was crushed and permanently disabled while popping a pillar.

In 1930 the mine was sold to a Mr. Brown who managed a Great Falls meat packing plant. He operated the mine for about one year, employing only a few miners. Then two men with the last names of Erebetta and Toulli took over the mine and the two mined it until 1932. They called it the Economy Mine. They only mined, at most, only a few tons of coal a day.

Several years ago Otto Johnson who owns the land, tore down the structures at the mine, collapsed the adit, spread out and partially covered the coal spoil with soil (Surmi 1987; Otto 1987).


PIERCE MINE
N
SUBSIDENCE AREA
1061
1067
1073
COUNTY ROAD
DEPRESSION
COLLAPSED AIR SHAFT
40m.



View of collapsed vent shaft at the Pierce Mine (view north).

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 1 Locational Information

1.1 Site number:
24JT152

1.2 Site name/field designation:
Keith Mine

1.3 County:
Judith Basin

1.4 Township/range:
T 17N R8E NW SW 1/4 SW NW 1/4 NE 1/4 of Section 21

1.5 UTM:
Zone 12 521 900 Easting 5229 850 Northing

1.6 Site type:
coal mine

1.7 Recording status & comments:
Photographed, mapped and recorded

1.8 Administrative/surface ownership:

Frank Skite
East of Raynesford, MT

1.9 Mineral ownership:

1.10 Project name:
Department of State Lands
Abandoned Mine Reclamation
Program

1.11 General narrative description of site:

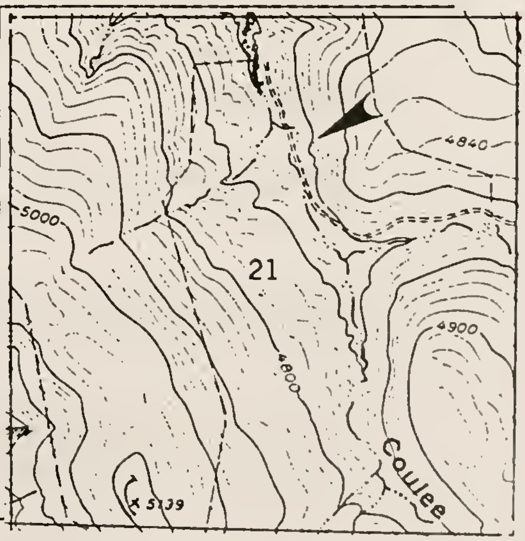
The site consists of two adits, coal spoil and the remains of a tipple. There are no standing structures. The mine was a small operation which was active during the 1920s.

1.12 Map reference:
USGS Limestone Butte, Mont. 7.5 min quad (1961)

1.13 City/town: ☒ vicinity of
Raynesford, MT

1.14 Access to site:

Drive east out of Raynesford on U.S. Highway 87 for one mile. Turn south on a ranch road and follow the road for just about three miles. Turn west onto an old ranch road and follow it for a mile to the mine.



MONTANA CULTURAL RESOURCE INVENTORY

Form No. 2. Environmental Setting

Site number: 24JT152

2.1 Geographic setting:

2.2 Elevation: 1438 m 4720 ft.

General: The site is in the foothils of the Little Belt Mountains.
Local: The site is on the west face of a 200 ft to 300 ft deep ravine that has been cut by the drainage in Ridley Coulee.

2.3 View/aspect:
View is limited to that within the coulee and this is about 1 km north and south.

2.4 Major drainage:
drainage in Ridley Coulee

2.5 Minor drainage(s):

2.6 Water sources:

| | Names | Distance | Ele. Change | Type & seasonality |
|---|---|---|---|---|
| a. | drainage in Nullimer Mine | 70 m | 20 m | intermittent |
| b. | | | | |

2.7 Regional vegetation:

Foothills Grassland (Payne 1973)

2.8 Local vegetation:
Douglas hawthorne, brome, wild rose, chokecherry, buckbrush and western wheatgrass

2.9 Soils:
reddish brown loam intermixed with sandstone

2.10 Surface visibility/season of survey:
good/early spring

2.11 Other environmental factors pertaining to site location:
The site is in the eastern portion of the Great Falls coal field.

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 3 Site Assessment and Recording Documentation

Site number: 24JT152

3.1 Condition of site: Destroyed.

3.2 Site significance (NRHP):
The mine provided coal to the local community for a number of years. This resource played an important role in helping make it possible for homesteaders to settle this area at the turn of this century. However, without the structures (i.e., tipple) the sites integrity has been sufficiently impaired that it is not recommended as eligible for listing on the NRHP.

☐ Attachments:

3.3 Impacts:
The Department of State Lands plans to close the mine opening, and either reclaim or remove coal waste areas.

3.4 Recommendations:
The site has been recorded, mapped and photographed and no further work on the site is recommended.

| | | |
|---|---|---|
| 3.5 Site located by:<br>Gene Munson<br>Date: 3/10/87 | 3.6 Site recorded by:<br>Gene Munson<br>Date: 3/10/87 | 3.7 Revisions by:<br>Date: |

3.8 Permit No.: NA

3.9 Publications concerning site:

Munson, Gene 1987 Cultural resource inventory and evaluation of selected coal mines in the Great Falls coal field. For the Montana Department of State Lands. GCM Services, Inc., Butte.

Payne, Gene F. 1973 Vegetative Rangeland Type in Montana. Montana Agricultural Experiment Station, Montana State University, Bozeman.

| | |
|---|---|
| 3.10 Artifact repository:<br>NA | 3.11 Field notes/maps/photo repository:<br>GCM Services, Inc.<br>1003 S. Montana St.<br>Butte, MT 59702 |

3.12 Photos & accession No:

| No. | Description | View |
|---|---|---|
| 24 | Adit 1 | E |
| 25 | overview | SE |
| 26 | overview | N |

## MONTANA CULTURAL RESOURCE INVENTORY

### Form No. 5. Description of Historic Sites

Site number: 24JT152

5.1 Site dimensions, how determined:
The site measures 55 m N/S x 35 m E/W. This is the area in which the adits and coal spoil are located.

1925 $m^2$

5.2 Features:
The features consist of two adits, coal spoil and the remains of a tipple. The adits are 40 m apart. One of the adits (adit #1) is open and the other is closed. The tipple remains consist of the posts that were the footings. An abandoned road passes through the site.

5.3 Artifacts (observed, collected):

Artifacts consist of a pile of railroad ties that block the entrance to the northern most adit.

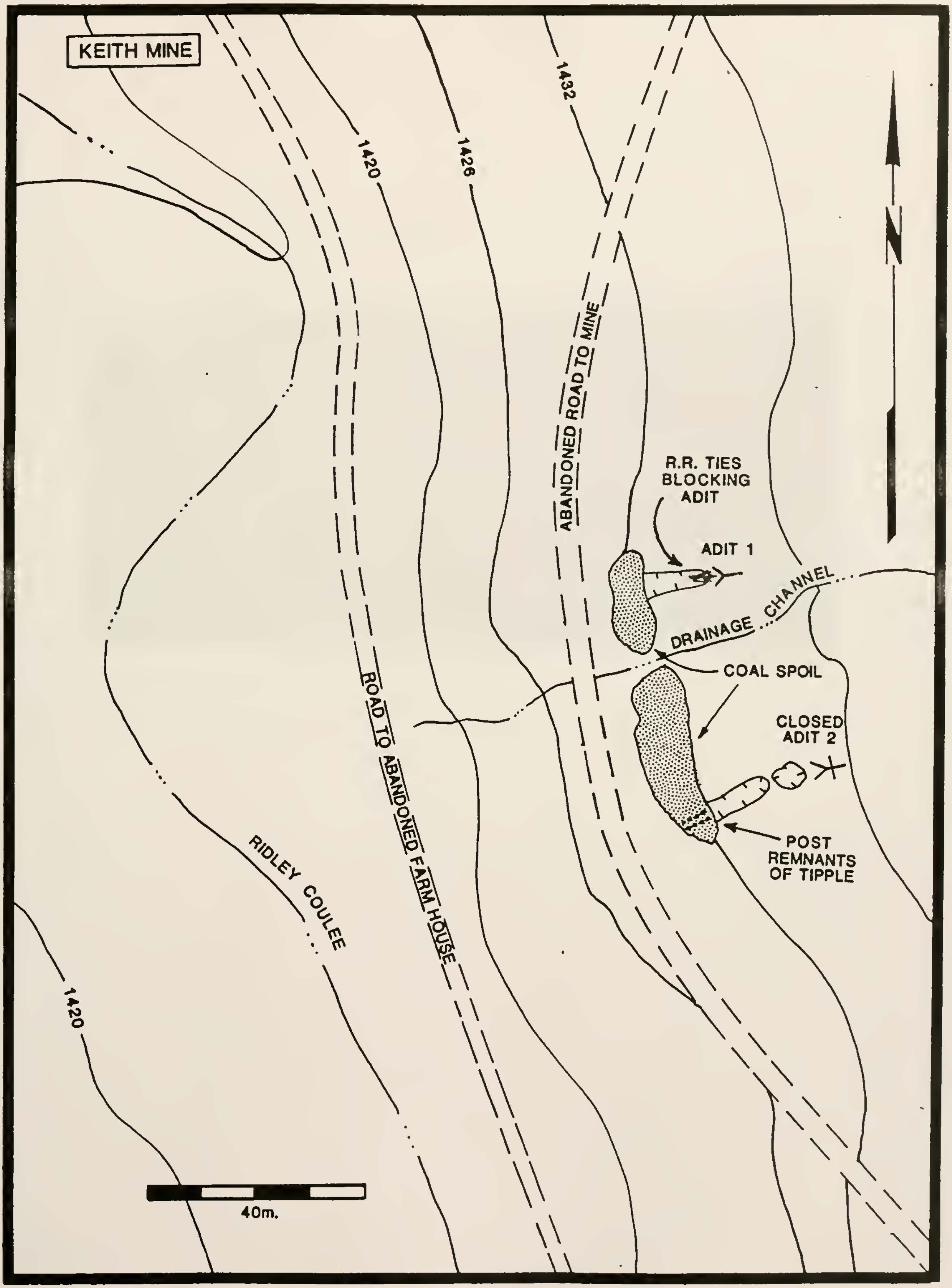
5.4 Historical information and evaluation:
The mine was operated during the 1920s by Tom Keith who sold coal locally. By the 1930s the local residents mined and hauled coal from the mine for their personal consumption. It was always a small wagon mine (Skite 1987).

5.5 References
(See Section 3.9)

Skite, Frank
1987 Personal communication, March 10, east of Raynesford, Montana.

5.6 Subsurface testing, results, methods, etc.

none


KEITH MINE
1420
1426
1432
ABANDONED ROAD TO MINE
R.R. TIES BLOCKING ADIT
ADIT 1
DRAINAGE CHANNEL
COAL SPOIL
CLOSED ADIT 2
POST REMNANTS OF TIPPLE
ROAD TO ABANDONED FARM HOUSE
RIDLEY COULEE
1420
N
40m.

Adit 1 at the Keith Mine (view east).

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 1 Locational Information

| | | |
|---|---|---|
| 1.1 Site number:<br>24JT153 | 1.2 Site name/field designation:<br>Nullimer Mine | 1.3 County:<br>Judith Basin |

1.4 Township/range:

T 17N R 8E NW 1/4 SE 1/4 SE 1/4 of Section 21

1.5 UTM:

Zone 12 522 200 Easting 5228 870 Northing

| | |
|---|---|
| 1.6 Site type:<br>coal mine | 1.7 Recording status & comments:<br>Photographed, mapped and recorded |

| | |
|---|---|
| 1.8 Administrative/surface ownership:<br>Thomas W. and Karen J. Palmer<br>south of Raynesford, Montana | 1.9 Mineral ownership: |
| | 1.10 Project name:<br>Department of State Lands Abandoned Mine Reclamation Program |

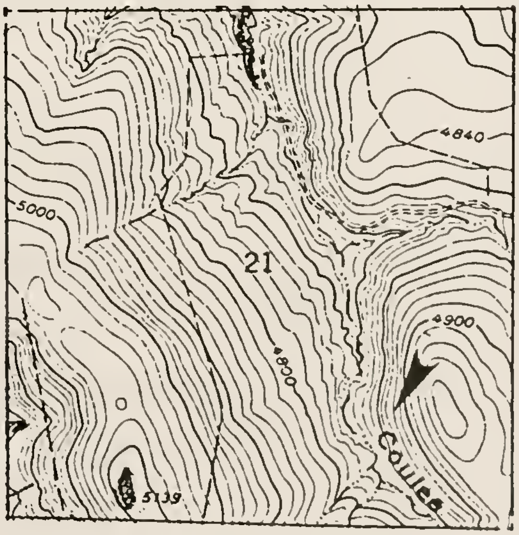
1.11 General narrative description of site:

The site consists of two collapsed adits, a coal spoil dump and the remains of a tipple. There are no standing structures. The site was originally a small coal mine which operated during the 1920s and early 1930s.

1.12 Map reference:
USGS Limestone Butte, Mont. 7.5 min quad (1961)

1.13 City/town: ☒ vicinity of
Raynesford, MT

1.14 Access to site:
Drive east out of Raynesford on U.S. Highway 87 for one mile. Turn south on a ranch road and follow the road for just about three miles. Turn west onto an old ranch road and follow it for a mile to the mine.



D86R.1

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 2. Environmental Setting

Site number: 24JT153

| | |
|---|---|
| 2.1 Geographic setting: | 2.2 Elevation: 1469 m 4820 ft. |

General: The site is in the foothils of the Little Belt Mountains.
Local: The site is on the west face of a 200 ft to 300 ft deep ravine that has been cut by the drainage in Ridley Coulee.

2.3 View/aspect:
View is limited to that within the coulee and this is about 1 km north and south.

| | |
|---|---|
| 2.4 Major drainage:<br>drainage in Ridley Coulee | 2.5 Minor drainage(s): |

2.6 Water sources:

| | Names | Distance | Ele. Change | Type & seasonality |
|---|---|---|---|---|
| a. | drainage in Ridley Coulee | 100 m | 30 m | intermittent |
| b. | | | | |

2.7 Regional vegetation:

Foothills Grassland (Payne 1973)

2.8 Local vegetation:
Douglas hawthorne, brome, wild rose, chokecherry, buckbrush and western wheatgrass

2.9 Soils:
reddish brown loam intermixed with sandstone

2.10 Surface visibility/season of survey:
good/early spring

2.11 Other environmental factors pertaining to site location:
The site is in the eastern portion of the Great Falls coal field.

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 3 Site Assessment and Recording Documentation

Site number: 24JT153

3.1 Condition of site: Destroyed.

3.2 Site significance (NRHP):
The mine provided coal to the local community for a number of years. This resource played an important role in helping make it possible for homesteaders to settle this area at the turn of this century. However, without the structures (i.e., tipple) the site's integrity has been sufficiently impaired that it is not recommended as eligible for listing on the NRHP.

☐ Attachments:

3.3 Impacts:
The Department of State Lands plans to close the mine opening, and either reclaim or remove coal waste areas.

3.4 Recommendations:
The site has been recorded, mapped and photographed and no further work on the site is recommended.

| | | |
|---|---|---|
| 3.5 Site located by:<br>Gene Munson<br>Date: 3/10/87 | 3.6 Site recorded by:<br>Gene Munson<br>Date: 3/10/87 | 3.7 Revisions by:<br><br>Date: |

3.8 Permit No.: NA

3.9 Publications concerning site:

Munson, Gene 1987 Cultural resource inventory and evaluation of selected coal mines in the Great Falls coal field. For the Montana Department of State Lands. GCM Services, Inc., Butte.

Payne, Gene F. 1973 Vegetative Rangeland Type in Montana. Montana Agricultural Experiment Station, Montana State University, Bozeman.

| | |
|---|---|
| 3.10 Artifact repository:<br>NA | 3.11 Field notes/maps/photo repository:<br>GCM Services, Inc.<br>1003 S. Montana St.<br>Butte, MT 59702 |

3.12 Photos & accession No:

| No. | Description | View |
|---|---|---|
| 28 | collapsed tipple | E |
| 29 | overview | NE |
| 30 | overview | E |

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 5. Description of Historic Sites

Site number: 24JT153

5.1 Site dimensions, how determined:
The site measures 30 m N/S x 60 m E/W. This is the area in which the adits and coal spoil are located.

1800 m²

5.2 Features:

The features consist of two collapsed adits, a coal spoil dump, and the remains of a tipple. The adits are adjacent to each other. The tipple remains consist of boards and planks. There is an abandoned road that terminates at the mine.

5.3 Artifacts (observed, collected):

The artifacts consist of the remains of a coal cart and part of a coal screen. The screen was constructed by nailing steel 3/8 in diameter rods onto a log and 2 x 6 frame. The rods were spaced about 1/2 in apart and the frame measured about 6 ft x 6 ft.

5.4 Historical information and evaluation:

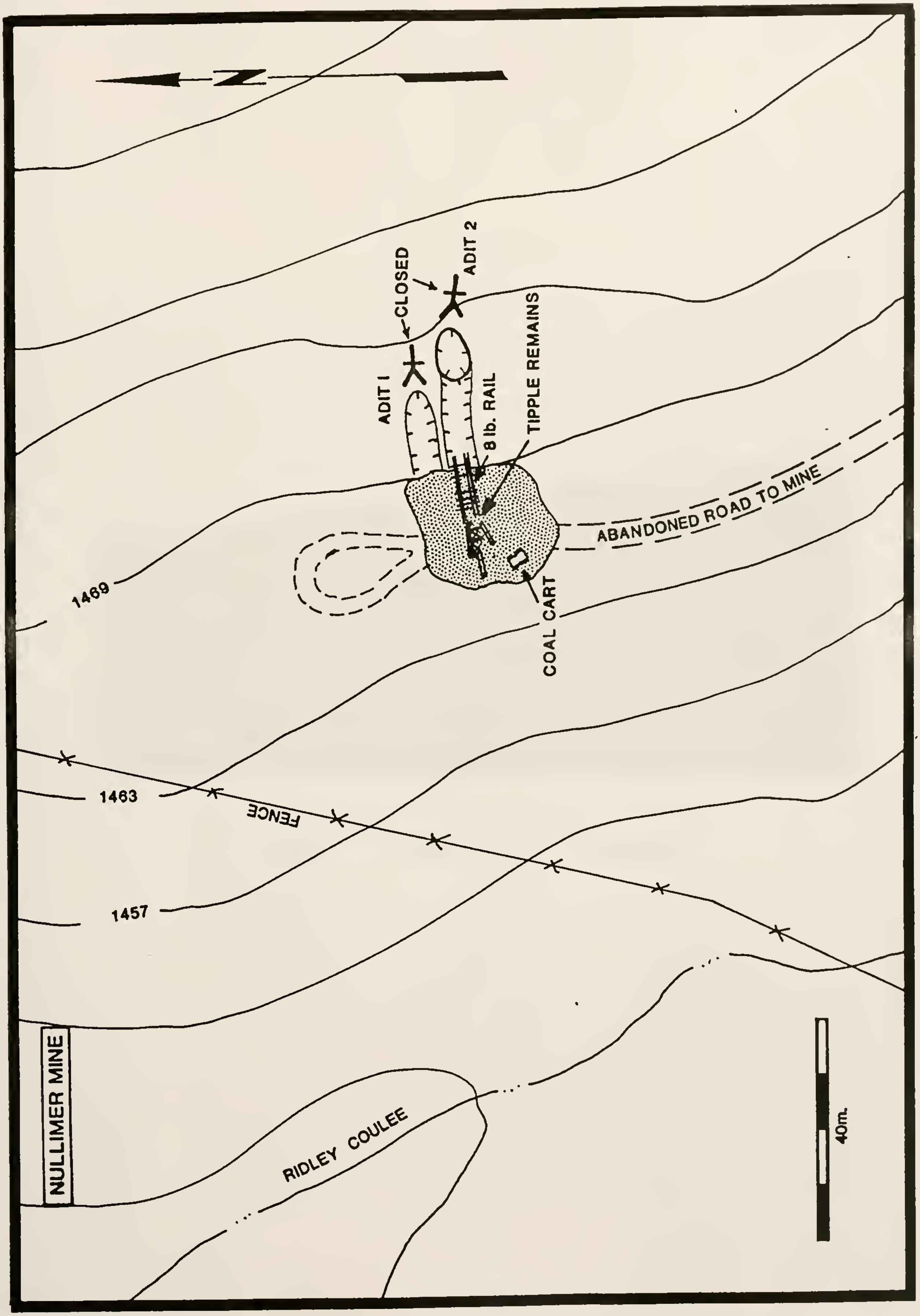
The mine was operated by Louis Nullimer during the 1920s and early 1930s. It was a small wagon mine which sold coal locally (Skites 1987).

5.5 References
(See Section 3.9)

Skites, Frank 1987 Personal communication, March 10, east of Raynesford, MT.

5.6 Subsurface testing, results, methods, etc.

None



NULLIMER MINE

Overview of Nullimer Mine (view northeast).

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 1 Locational Information

| | | |
|---|---|---|
| 1.1 Site number:<br>24JT154 | 1.2 Site name/field designation:<br>Nollar Mine | 1.3 County:<br>Judith Basin |

1.4 Township/range:

T 17N R 9E N 1/2 S 1/2 NW 1/4 of Section 29

1.5 UTM:

Zone 12 529 400 Easting 528 150 Northing

| | |
|---|---|
| 1.6 Site type:<br>coal mine | 1.7 Recording status & comments:<br>Photographed, mapped and recorded |

| | |
|---|---|
| 1.8 Administrative/surface ownership:<br>David J. McKay<br>southeast of Raynesford, Montana | 1.9 Mineral ownership: |
| | 1.10 Project name:<br>Department of State Lands Abandoned Mine Reclamation Program |

1.11 General narrative description of site:

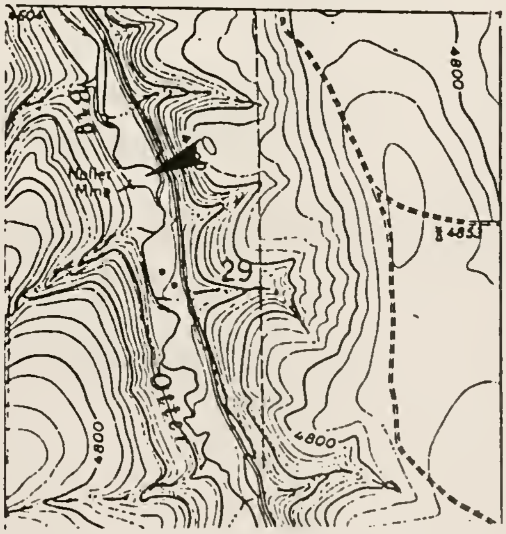
The site consists of six adits, coal spoil dumps, collapsed buildings and the remains of a tipple. The mine was a small operation which ran intermitently over an extended period from 1902 to the early 1940s.

1.12 Map reference:
USGS The Arch, Mont. 7.5 min quad (1961)

1.13 City/town: ☒ vicinity of
Raynesford, Montana

1.14 Access to site:

Drive east of Raynesford on U.S. Highway 87 for 2.5 miles. Turn southeast on a gravel road and follow the road for about five miles. The site is about 150 m west of the road.



MONTANA CULTURAL RESOURCE INVENTORY

Form No. 2. Environmental Setting

Site number: 24JT154

2.1 Geographic setting:

2.2 Elevation: 1378 m 4520 ft.

General: The site is in the foothills of the Little Belt Mountains.
Local: The site is in a ravine drained by Big Otter Creek.

2.3 View/aspect:
View is limited to the ravine. This is 1 km to the northwest and southeast.

2.4 Major drainage:
Big Otter Creek

2.5 Minor drainage(s):

2.6 Water sources:

| | Names | Distance | Ele. Change | Type & seasonality |
|---|---|---|---|---|
| a. | Big Otter Creek | 50 m | 2 m | year around |
| b. | | | | |

2.7 Regional vegetation:
foothills grassland (Payne 1973)

2.8 Local vegetation:
willow, Douglas hawthorne, chokecherry, buckbrush, wild rose, Timothy and brome

2.9 Soils:
dark brown loam

2.10 Surface visibility/season of survey:
fair to poor/early spring

2.11 Other environmental factors pertaining to site location:
The site is in the eastern portion of the Great Falls coal field.

## MONTANA CULTURAL RESOURCE INVENTORY

## Form No. 3 Site Assessment and Recording Documentation

Site number: 24JT154

3.1 Condition of site: Deteriorated.

3.2 Site significance (NRHP):
The site produced coal for the local communities for a large number of years. This important fuel resource played an important role in the settlement of Montana during the Homestead Era at the turn of this century. However, the deteriorated condition of the remains at the site is sufficient that its integrity has been impaired. The site is not considered as eligible for listing on the NRHP.

☐ Attachments:

3.3 Impacts:
The Department of State Lands plans to close the mine opening, and either reclaim or remove coal waste areas.

3.4 Recommendations:
The site has been recorded, mapped and photographed and no further work on the site is recommended.

| | | |
|---|---|---|
| 3.5 Site located by:<br>Gene Munson | 3.6 Site recorded by:<br>Gene Munson | 3.7 Revisions by: |
| Date: 3/10/87 | Date: 3/10/87 | Date: |

3.8 Permit No.: NA

3.9 Publications concerning site:

Fisher, Cassius A. 1909 Geology of the Great Falls Coal Field, Montana. *United States Geological Survey*. Bulletin 356, p. 85.

Munson, Gene 1987 *Cultural resource inventory and evaluation of selected coal mines in the Great Falls coal field*. For the Montana Department of State Lands. GCM Services, Inc., Butte.

Payne, Gene F. 1973 Vegetative Rangeland Type in Montana. *Montana Agricultural Experiment Station, Montana State University*, Bozeman.

Kolar, Armont Julia 1976 The Joe Armont Family. In *Furrows and Trails in Judith Basin*. n.p.

| | |
|---|---|
| 3.10 Artifact repository:<br>NA | 3.11 Field notes/maps/photo repository:<br>GCM Services, Inc.<br>1003 S. Montana St.<br>Butte, MT 59702 |

3.12 Photos & accession No:

| No. | Description | View |
|---|---|---|
| 32 | overview | S |
| 33 | tipple | S |
| 34 | overview | S |

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 5. Description of Historic Sites

Site number: 24JT154

5.1 Site dimensions, how determined:
The site measures 290 m north/south x 80 m east/west. This is the area in which the features are located.

23,200 m2

5.2 Features:
The features are grouped into two categories: 1) the adits and the features directly associated with them, and 2) the features not associated with any one adit. The adits are located for about 260 m along the face of the ravine. They are a few meters above the creek.

Adit 1 consists of a collapsed adit, some coal spoil and a pile of boards.

Adit 2 consists of an open adit, coal spoil and a tipple. The tipple is in part still standing. It was at one time a fairly large structure being about 25 ft high and 20 ft wide. Because of deterioration of the structure it was not possible to discern its length. Construction materials are large upright poles with planks used as cross members.

Adit 3 is an open adit.

Adit 4 and 5 which are collapsed, are 9 m apart and share the same coal spoil dump.

Adit 6 is collapsed. There are three distinct coal spoil dumps near the adit. There appears to be a thin mantle of coal spoil covering much of the area around adit 6. Vegetation has obscured much of this mantle of coal spoil.

Feature 1 is a collapsed shed. The building was of frame construction and measured around 10 ft x 10 ft.

Feature 2 is a collapsed house. It was of frame construction and had a gable roof.

Feature 3 is a collapsed dug out in the hillside. The remains of two doors at the entrance suggests that it may have been a root cellar.

5.3 Artifacts (observed, collected):
The artifact at the tipple in front of Adit 2 consist of a winch drum. In the collapsed house (Feature 2) are the remains of wood cook stove and springs from a bed. At Adit 6 are located the remains of a circa 1920 automobile.

5.4 Historical information and evaluation:
See attached.

5.5 References:
(See Section 3.9)

Bodner, Conrad 1987 Personal communication, March 10, southeast of Raynesford, MT.

McAllister, Vincent 1987 Personal communication, April 8, Geyser, Montana.

5.6 Subsurface testing, results, methods, etc.:
None

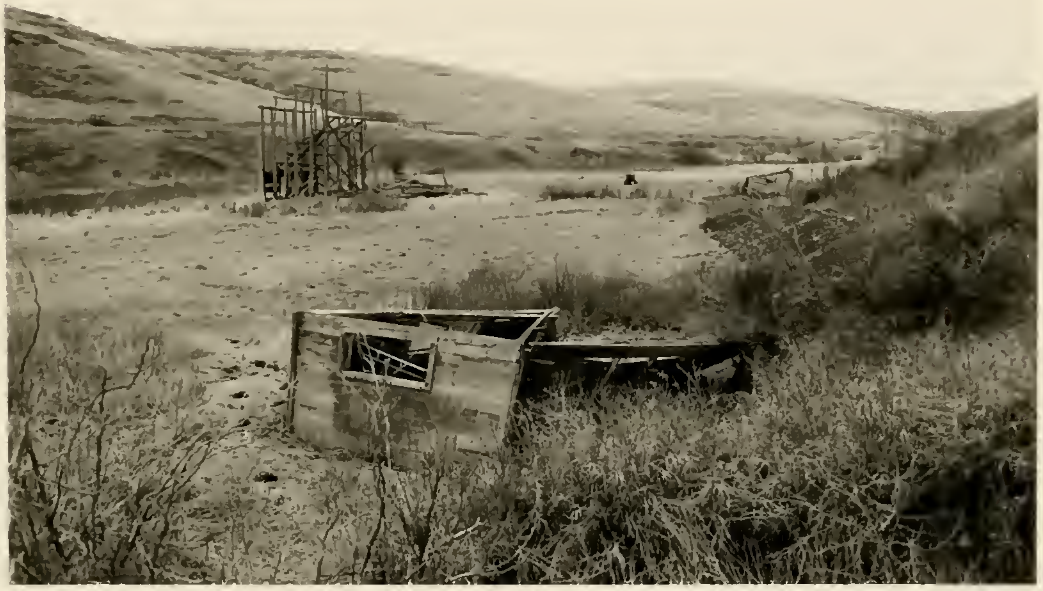
## 5.4 Historical information and evaluation: (continued)

The mine was opened in 1902 by Mr. Nollar* and was operated intermittently until the 1940s. When Fisher (1909) visited the mine in 1906 the entry extended 275 feet from the outcrop in a southwesterly direction. The entry was made so that it crossed the dip of the formation at an angle. By doing this the entry gradually rose, facilitating the drainage of water from the mine. There were two side entries at the right angles to the main entry, one about 80 ft and the other about 200 ft from the face. The coal seam was four feet thick with no parting.

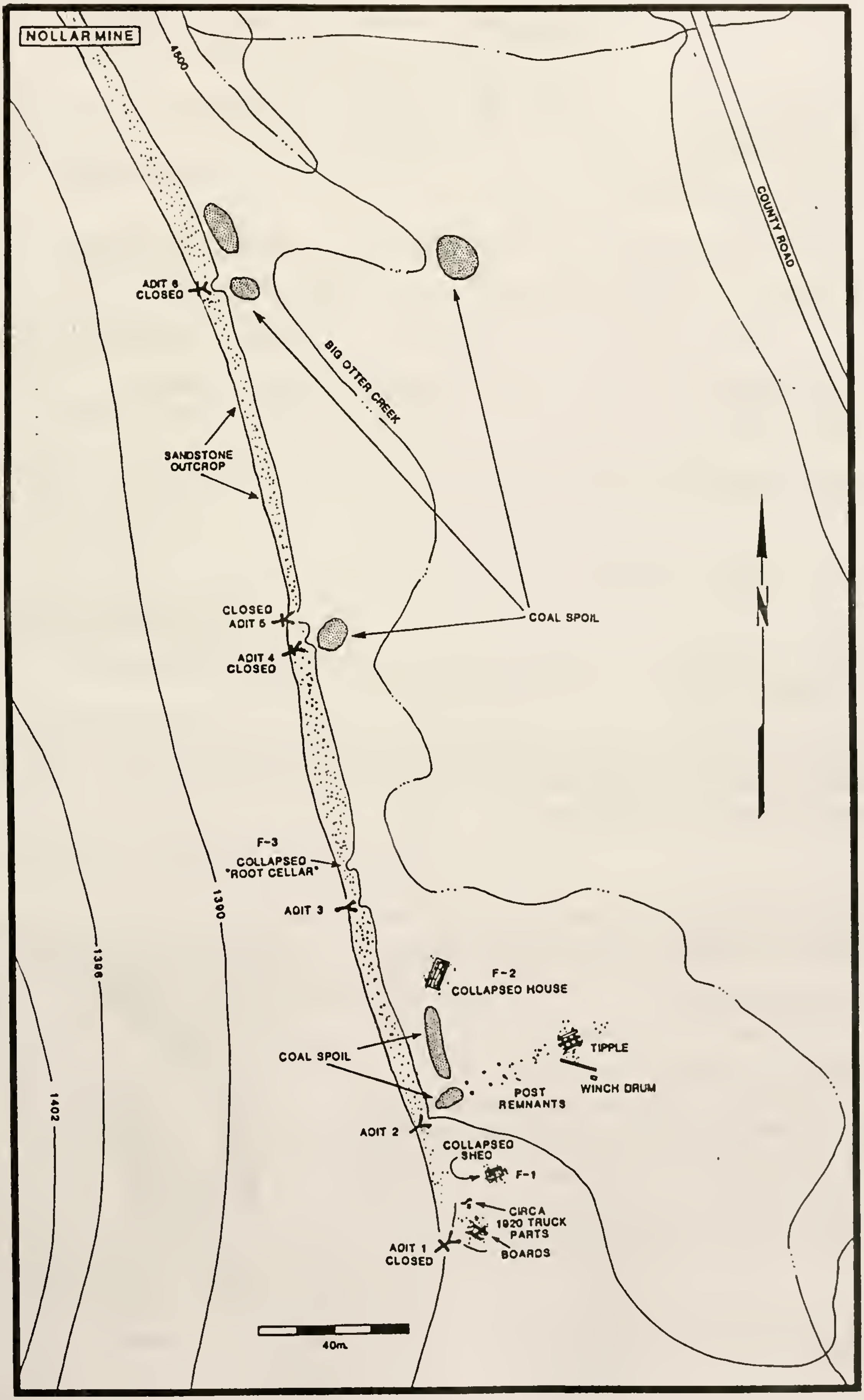
Apparently, several different people operated the mine during its lifetime. Around 1920 Joe Armont leased the mine (Kolar 1976). Conrad Bodner (1987) remembered Nathen Savage as operating the mine in the 1930s. Vincent McAllister (1987) said two people by the names of Walker and Sextant were the last to operate the mine and that was in the early 1940s. He said that water became a problem. It has the most extensive underground workings of the local mines.

The coal was sold to the local communities of Geyser, Raynesford and Hughesville (McAllister 1987; Bodner 1987).

*[The U.S.G.S. The Arch, Mont. 7.5 quad spells Noller with an "e" and Fisher (1909) spells the name with an "a", i.e., Nollar.]



Overview of Nollar Mine (view south).


NOLLAR MINE
4600
COUNTY ROAD
ADIT 6
CLOSED
BIG OTTER CREEK
SANDSTONE
OUTCROP
CLOSED
ADIT 5
ADIT 4
CLOSED
COAL SPOIL
N
F-3
COLLAPSED
"ROOT CELLAR"
ADIT 3
1390
1396
1402
F-2
COLLAPSED HOUSE
TIPPLE
COAL SPOIL
POST
REMNANTS
WINCH DRUM
ADIT 2
COLLAPSED
SHED
F-1
CIRCA
1920 TRUCK
PARTS
BOARDS
ADIT 1
CLOSED
40m.

## MONTANA CULTURAL RESOURCE INVENTORY

### Form No. 1 Locational Information

1.1 Site number:
24JT155

1.2 Site name/field designation:
McAllister Mine

1.3 County:
Judith Basin

1.4 Township/range:

T 17N R 9E NW 1/4 NW 1/4 NE 1/4 of Section 32

1.5 UTM:

Zone 12 529 870 Easting 5227000 Northing

1.6 Site type:
coal mine

1.7 Recording status & comments:
Photographed, mapped and recorded

1.8 Administrative/surface ownership:

David J. McKay
Geyser, Montana

1.9 Mineral ownership:

1.10 Project name:
Department of State Lands
Abandoned Mine Reclamation
Program

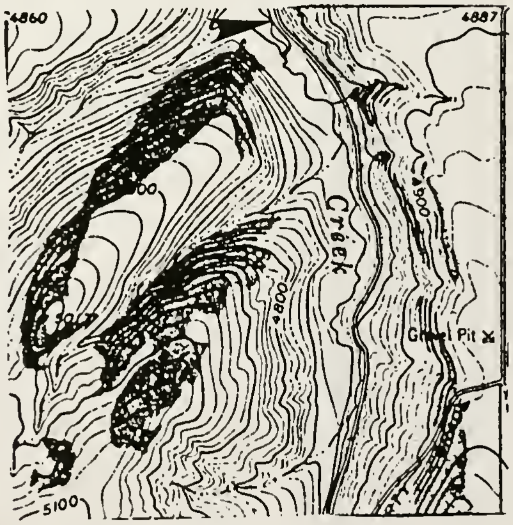
1.11 General narrative description of site:

The site consists of an open adit and a coal spoil dump. There are no standing structures left at the mine. The site was originally a prospect operation and later developed into a small mine which operated for about a year durng the mid-1930s.

1.12 Map reference:
USGS 7.5 min quad, The Arch, Mont (1961)

1.13 City/town: ☒ vicinity of
Raynesford, Montana

1.14 Access to site:
Drive east out of Raynesford on U.S. Highway 87 for about 2.5 miles. Turn southeast onto the Big Otter Creek road. Follow this road for a little over five miles. Here the road curves around a sandstone outcrop. The mine is adjacent to and east of the road.



MONTANA CULTURAL RESOURCE INVENTORY

Form No. 2. Environmental Setting

Site number: 24JT155

2.1 Geographic setting:

2.2 Elevation: 1417 m 4650 ft.

General: The site is located in the foothills of the Little Belt Mountains.

Local: The site is on the southwest facing slopeland of the ravine cut by Big Otter Creek. It is about 20 m above the valley floor.

2.3 View/aspect:
The view is to the northwest and southeast into the Big Otter Creek drainage and this is for about .5 km.

2.4 Major drainage:
Big Otter Creek

2.5 Minor drainage(s):

2.6 Water sources:

| | Names | Distance | Ele. Change | Type & seasonality |
|---|---|---|---|---|
| a. | Big Otter Creek | .2 km | 15 m | year around |
| b. | | | | |

2.7 Regional vegetation:
foothill grassland (Payne 1973)

2.8 Local vegetation:
limber pine, ponderosa pine, wildrose, chokecherry and western wheatgrass

2.9 Soils:
brown loam

2.10 Surface visibility/season of survey:
good/early spring

2.11 Other environmental factors pertaining to site location:
The site is in the eastern portion of the Great Falls coal field.

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 3 Site Assessment and Recording Documentation

Site number: 24JT155

3.1 Condition of site: Destroyed.

3.2 Site significance (NRHP):

The mine produced little coal, therefore, contributing little to the local history. The site does not meet any of the NRHP criteria. It is not recommended as eligible for listing on the NRHP.

☐ Attachments:

3.3 Impacts:
The Department of State Lands plans to close the mine opening and either reclaim or remove coal waste areas.

3.4 Recommendations:
The site has been recorded, mapped and photographed and no further work on the site is recommended.

| | | |
|---|---|---|
| 3.5 Site located by:<br>Gene Munson<br>Date: 3/10/87 | 3.6 Site recorded by:<br>Gene Munson<br>Date: 4/8/87 | 3.7 Revisions by:<br>Date: |

3.8 Permit No.: N/A

3.9 Publications concerning site:

Fisher, Cassius A. 1906 The Great Falls Coal Field. In Contributions to Economic Geology Part II - coal, lignite, and peat. United States Geological Survey Bulletin 316, p. 161-193.

Munson, Gene 1987 Cultural resource inventory and evaluation of selected coal mines in the Great Falls coal field. For the Montana Department of State Lands. GCM Services, Inc. Butte.

Payne, Gene F. 1973 Vegetative Rangeland Type in Montana. Montana Agricultural Experiment Station, Montana State University, Bozeman.

| | |
|---|---|
| 3.10 Artifact repository:<br>N.A. | 3.11 Field notes/maps/photo repository:<br>GCM Services, Inc.<br>1003 S. Montana St.<br>Butte, MT 59702 |

3.12 Photos & accession No:

| No. | Description | View |
|---|---|---|
| 36 | overview | NE |

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 5. Description of Historic Sites

Site number: 24JT155

---

5.1 Site dimensions, how determined:
The site measures 70 m NE/SW x 55 m NW/SE. This is the area in which the adit and coal spoil is located.

3850 $m^2$

---

5.2 Features:

The features consist of an adit that is partially open and coal spoil. The county road cuts through the coal spoil.

---

5.3 Artifacts (observed, collected):
None observed.

---

5.4 Historical information and evaluation:

Fisher (1906) on plate X shows a prospect at the location of the site. Vincent McAllister (1987) said that only a prospect hole was present when his brother, Dick, started mining at the site in 1934. Dick McAllister worked the mine for a year or so. The coal seam pinched out so it was abandoned. A small mount of the coal was sold locally.

---

5.5 References
(See Section 3.9)

McAllister, Vincent
1987 Personal communication, April 8, Geyser, Montana.

---

5.6 Subsurface testing, results, methods, etc.

None

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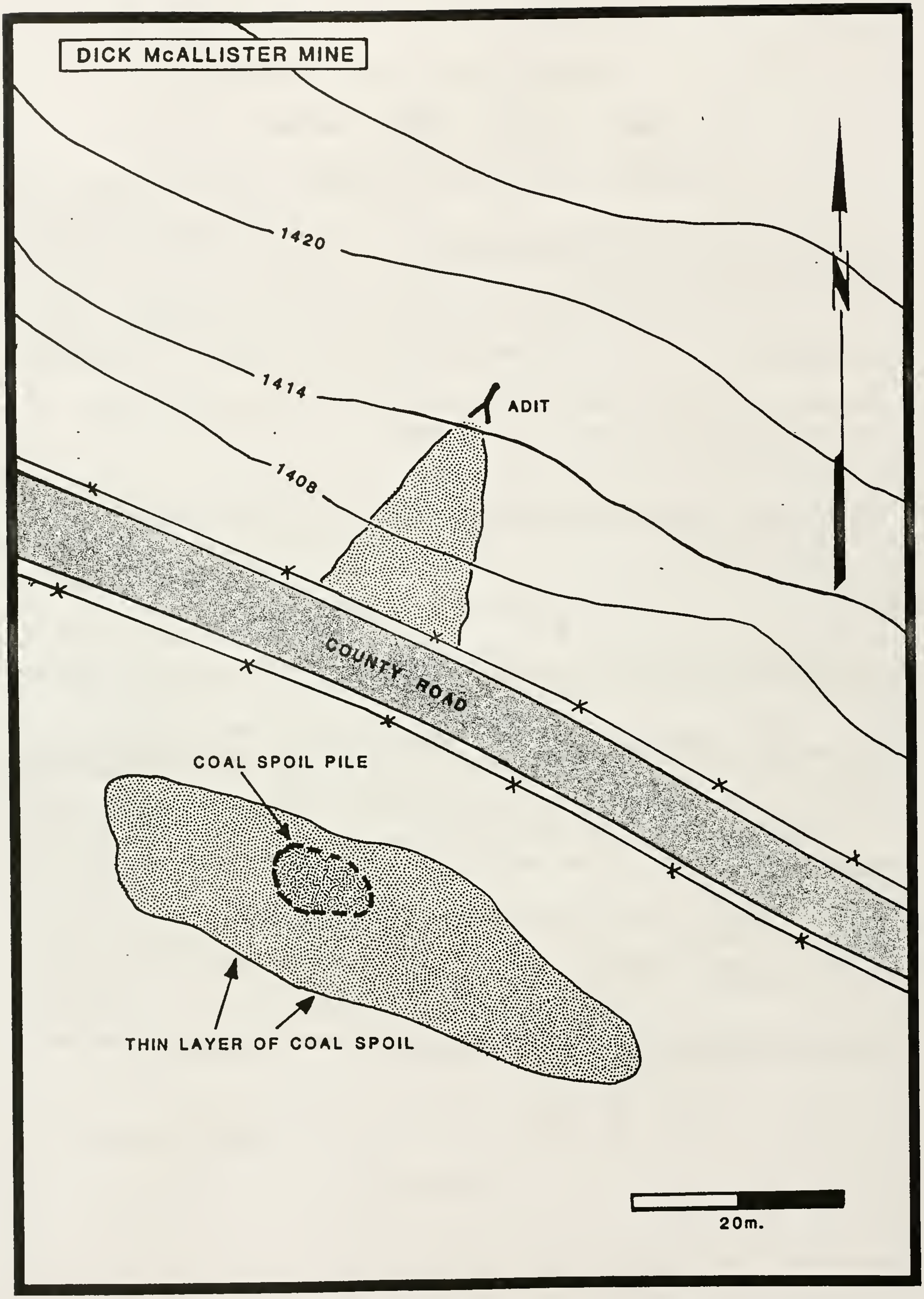
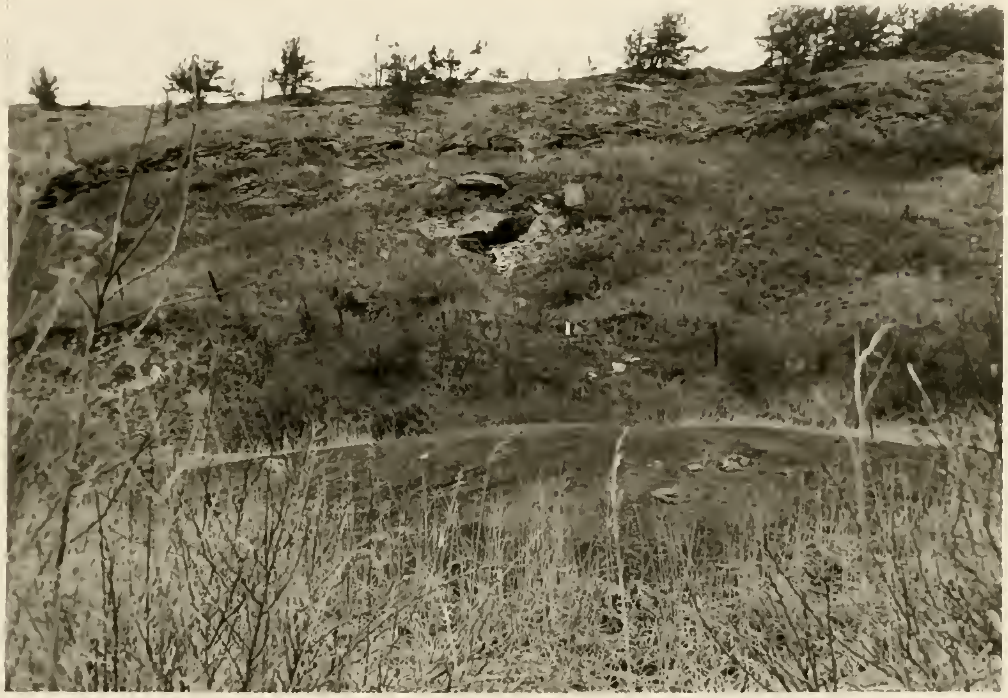

DICK McALLISTER MINE
1420
1414
ADIT
1408
N
COUNTY ROAD
COAL SPOIL PILE
THIN LAYER OF COAL SPOIL
20m.



Overview of McAllister Mine (view northeast).

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 1 Locational Information

| | | |
|---|---|---|
| 1.1 Site number:<br>24JT156 | 1.2 Site name/field designation:<br>McCarty Grade Mines | 1.3 County:<br>Judith Basin |

1.4 Township/range:

T 17N R 9E S 1/2 NE 1/4
NW 1/4 NE 1/4 SE 1/4 of Section 32

1.5 UTM:

Zone 12

Mine 1 - 530 380 Easting 5225 900 Northing
Mine 2 - 530 380 Easting 5226 180 Northing

| | |
|---|---|
| 1.6 Site type:<br>coal mine | 1.7 Recording status & comments:<br>Photographed, mapped and recorded |

1.8 Administrative/surface ownership:

David McKay
Geyser, Montana

1.9 Mineral ownership:

1.10 Project name:
Department of State Lands
Abandoned Mine Reclamation
Program

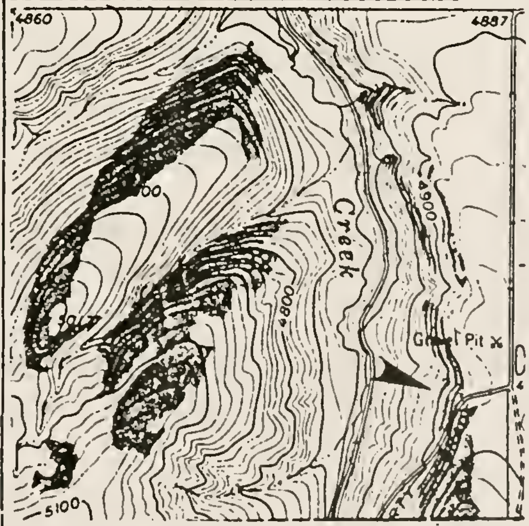
1.11 General narrative description of site:

The site consists of five adits and associated coal spoil dumps. First opened up around 1910, the mines continued to produce until the late 1930s.

1.12 Map reference:
USGS 7.5 Min Quad, The Arch, Montana - 1961

1.13 City/town: ☒ vicinity of
Raynesford, Montana

1.14 Access to site:
Drive east of Raynesford on U.S. Highway 87 for about 2.5 miles. Turn southeast onto the Big Otter Creek road. Follow this road for 5-1/2 miles. The site is on the east side of the road near the top of the 300 ft deep ravine cut by Big Otter Creek.



# MONTANA CULTURAL RESOURCE INVENTORY

## Form No. 2. Environmental Setting

Site number: 24JT156

2.1 Geographic setting:

2.2 Elevation: 1487 m 4880 ft.

General: The site is on the north edge of the Little Belt Mountain foothills.

Local: The site is on the east face of a 300 ft deep ravine that was cut by Big Otter Creek.

2.3 View/aspect:
The view is for over 1 km up and down (south and north) the Big Otter Creek drainage.

2.4 Major drainage:

Big Otter Creek

2.5 Minor drainage(s):

2.6 Water sources:

|  | Names | Distance | Ele. Change | Type & seasonality |
|---|---|---|---|---|
| a. | Big Otter Creek | .3 km | 90 m | year around |
| b. |  |  |  |  |

2.7 Regional vegetation:

foothill - grassland (Payne 1973)

2.8 Local vegetation:

ponderosa pine, juniper, wildrose, mountain brome, Douglas hawthorne and western wheatgrass

2.9 Soils:
brown loam

2.10 Surface visibility/season of survey:
good/early spring

2.11 Other environmental factors pertaining to site location:
The site is in the eastern portion of the Great Falls coal field.

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 3 Site Assessment and Recording Documentation

Site number: 24JT156

3.1 Condition of site: Destroyed.

3.2 Site significance (NRHP):

The site provided fuel for the local burgeoning farming communities and the mining community of Hughesville. This important resource helped make it possible to settle this part of Montana during the early part of this century. However, none of the structures (e.g., tipples) remain today. Without these structures much of the sites integrity has been lost. It is not recommended as eligible for listing on the NRHP.

3.3 Impacts:
The Department of State Lands plans to close the mine openings, and either reclaim or remove coal waste areas.

3.4 Recommendations:
The site has been recorded, mapped and photographed and no further work on the site is recommended.

| | | |
|---|---|---|
| 3.5 Site located by:<br>Gene Munson<br>Date: 3/10/87 | 3.6 Site recorded by:<br>Gene Munson<br>Date: 4/8/87 | 3.7 Revisions by:<br>Date: |

3.8 Permit No.: N/A

3.9 Publications concerning site:

Kolar, Julia Armont 1976 Joe Armont family. In Furrows and Trails in Judith Basin, n.p. p. 60 and 61.

Munson, Gene 1987 Cultural resource inventory and evaluation of selected coal mines in the Great Falls coal field. For the Montana Department of State Lands. GCM Servics, Inc., Butte.

Payne, Gene F. 1973 Vegetative Rangeland Type in Montana. Montana Agricultural Experiment Station, Montana State University, Bozeman.

| | |
|---|---|
| 3.10 Artifact repository:<br>N/A | 3.11 Field notes/maps/photo repository:<br>GCM Services, Inc.<br>1003 S. Montana St.<br>Butte, MT 59702 |

3.12 Photos & accession No:

| No. | Description | View |
|---|---|---|
| 38 | overview | E |
| 39 | Mine 1 | E |
| 41 | Mine 2 | E |
| 44 | Mine 1 | E |

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 5. Description of Historic Sites

Site number: 24JT156

5.1 Site dimensions, how determined:
The site is noncontiguous along the east face of the Big Otter Creek ravine. Mine 1 area is 60 m N/S x 140 m E/W and mine 2 area is 70 m N/S x 70 m E/W. This is the area in which the features are located.

Mine 1: 8400 $m^2$
Mine 2: 4900 $m^2$

5.2 Features:
Mine 1: The adits and coal spoil dumps directly associated with them are discussed separately from the coal dumps that are not associated with any one adit. These coal dumps are given individual feature numbers.

Adits 1 and 2 are located adjacent to each other. In front of the adits is a pile of coal waste that has been scattered downslope. Posts that were footings for a tipple are located in this pile of coal. An abandoned road begins where the tipple was located and descends the face of the ravine. Immediately south of adit 1 is a long and narrow bank of coal approximately 20 m in length. At the terminus of the coal bank is a small pile of coal spoil.

Feature 1 is a small pile of coal spoil located about 50 m south of adit 1. Feature 2 is a slightly larger pile of coal spoil a few meters south of Feature 1. Feature 3 is a pile of coal spoil located downslope and some 120 m west of the mine. In the coal spoil are remains of three posts that may have been part of a tipple at one time. McAllister (1987) did not remember a tipple located at Feature 3.

Mine 2: Adits 1 and 2 are located adjacent to each other and share a common coal spoil dump.

Adit 3 is located about 60 m north of adit 2. It has a small coal spoil dump in front of it. An abandoned road passes in front of adits 1 and 2 and terminates at adit 3. The coal spoil dump at adits 1 and 2 covers the road which implies that these were mined after adit 3.

5.3 Artifacts (observed, collected):
Mine 1: The artifacts at Mine 1 consist of hoist parts, engine parts, cart parts and bedsprings that are located on the coal spoil dump in front of adits 1 and 2. At Feature 3 there are the remains of a privy and body parts off of a Model T Ford coupe. Mine 2: No artifacts were observed at Mine 2.

5.4 Historical information and evaluation: See Attached.

5.5 References:
(See Section 3.9)

Malmberg, Lawrence 1987 Personal communication, April 8, southwest of Geyser, MT.
McAllister, Vincent 1987 Personal communication, April 8, Geyser, MT.

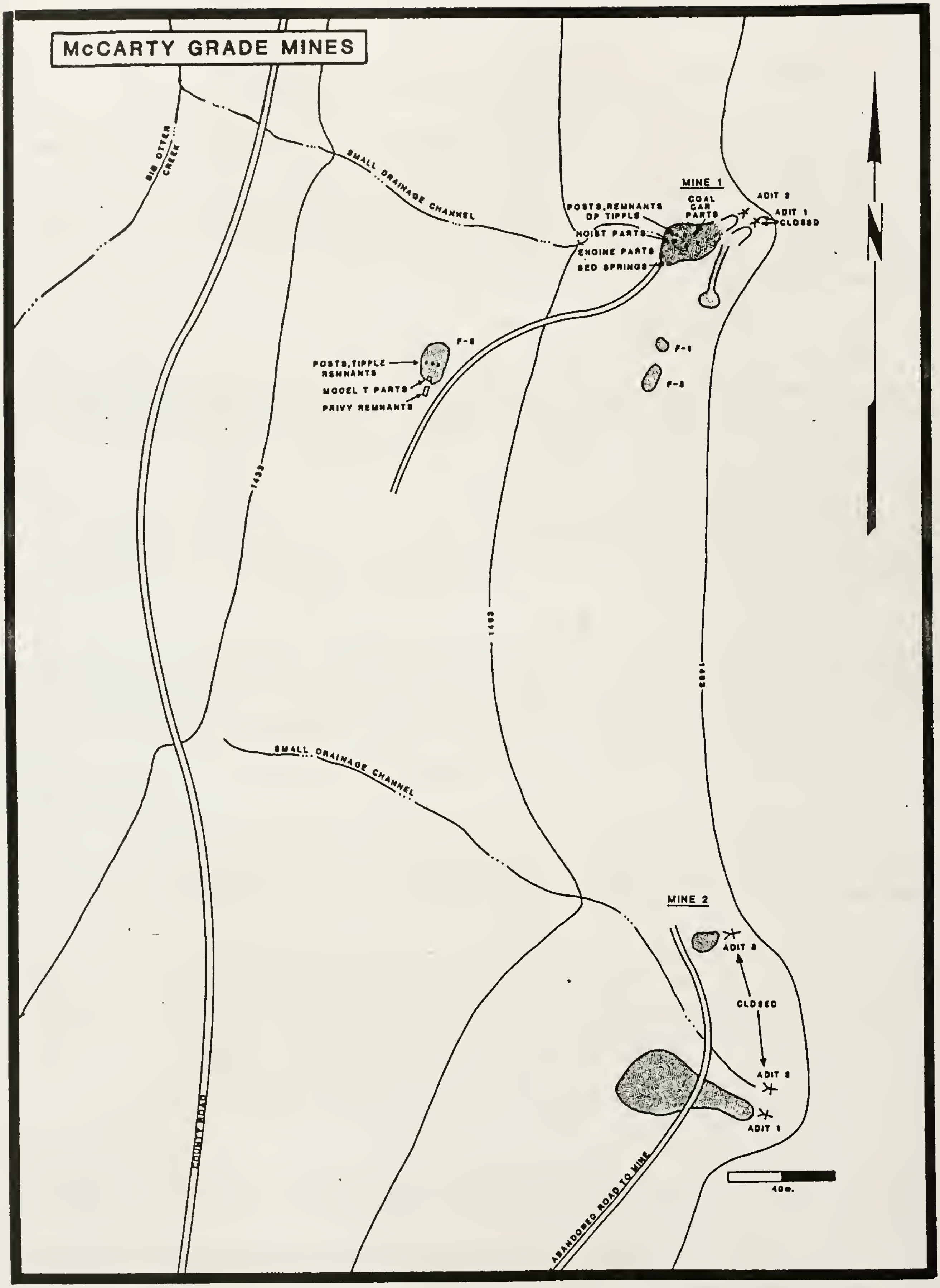
5.6 Subsurface testing, results, methods, etc.: None

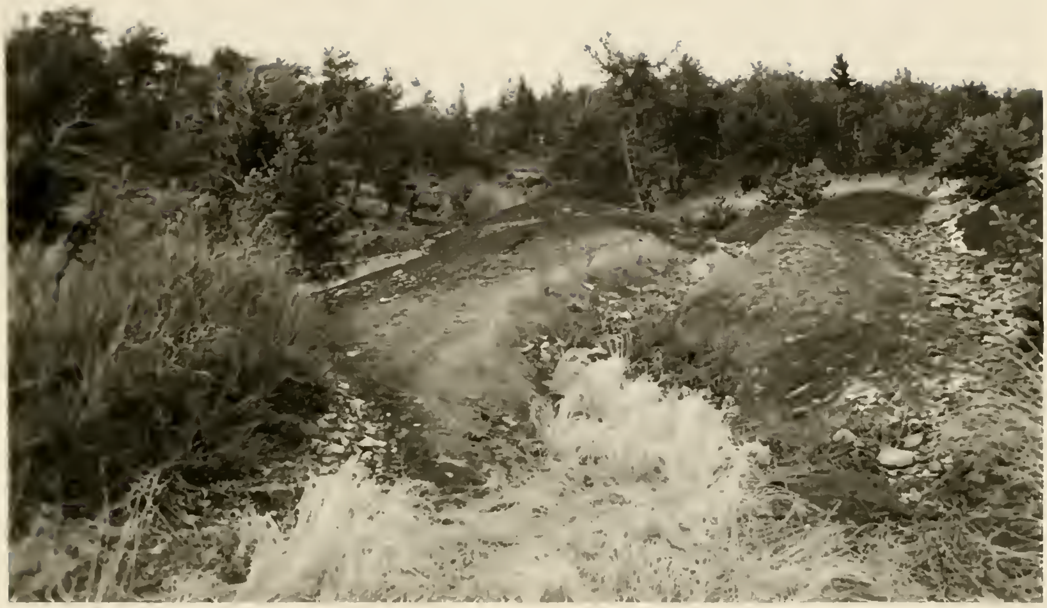
5.4 Historical information and evaluation: (continued)

The mines on the McCarty Grade opened up around 1910 by Joe Armont (Kolar 1976). Apparently these were the southern most adits (Mine 2 on sketch map). Around 1920 Pat McAllister opened up the northern most adits (Mine 1 on sketch map). The McAllister family mined the McCarty Grade mines until the late 1930s. A brother of Vincent McAllister was blown-up while carrying powder from the powder magazine to the mine. He was smoking a cigar at the time and they attributed this as the cause of the explosion (McAllister 1987; Malmberg 1987).

The coal seam dips to the east which is down slope from the mine portal so a winch was used to haul the coal out of the mine.

Coal from these small mines was sold locally to the Raynesford and Geyser communities. It was also hauled over Horseshoe Bend in the Little Belt Mountains to Hughesville which was a mining town located about seven miles south of the site (Kolar 1976).


McCARTY GRADE MINES
N
BIG OTTER CREEK
SMALL DRAINAGE CHANNEL
MINE 1
ADIT 2
ADIT 1
CLOSED
COAL CAR PARTS
POSTS,REMNANTS OF TIPPLE
HOIST PARTS
ENGINE PARTS
BED SPRINGS
F-1
F-2
F-3
POSTS,TIPPLE REMNANTS
MODEL T PARTS
PRIVY REMNANTS
1433
1403
1403
SMALL DRAINAGE CHANNEL
MINE 2
ADIT 3
CLOSED
ADIT 2
ADIT 1
ABANDONED ROAD TO MINE
40m.



Coal spoil dump at McCarty Grade Mine 2 (view east).

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 1 Locational Information

| | | |
|---|---|---|
| 1.1 Site number:<br>24JT157 | 1.2 Site name/field designation:<br>Chambers Mine | 1.3 County:<br>Judith Basin |

1.4 Township/range:

T 17N R 9E NW 1/4 SE 1/4 NE 1/4 SW 1/4 SW 1/4 of Section 33

1.5 UTM:

Zone 12 530 950 Easting 5225600 Northing

| | |
|---|---|
| 1.6 Site type:<br>coal mine | 1.7 Recording status & comments:<br>Photographed, mapped and recorded |

1.8 Administrative/surface ownership:

Lawrence and Cheryl Malmberg
Southwest of Geyser, Montana

1.9 Mineral ownership:

1.10 Project name:
Department of State Lands Abandoned Mine Reclamation Program

1.11 General narrative description of site:

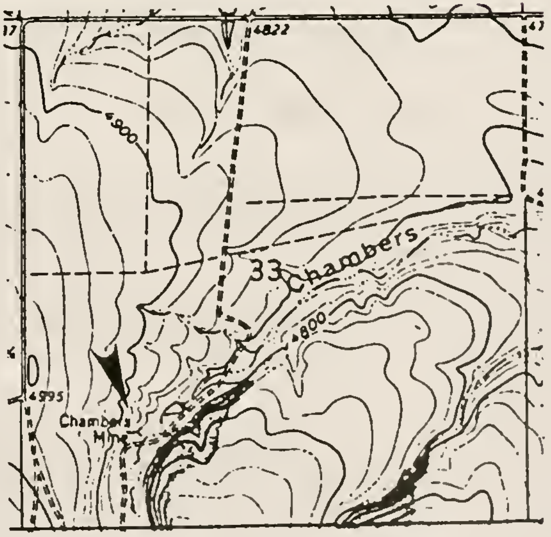
The site consists of six adits and associated coal spoil dumps. There are no standing structures. The mine was a small operation which sold coal to local residents from 1903 to 1937.

1.12 Map reference:
USGS Limestone Butte, Mont. 7.5 Min. Quad - 1961

1.13 City/town: ☒ vicinity of
Raynesford, MT

1.14 Access to site:

Drive east out of Raynesford on U.S. Highway 87 for about 2.5 miles. Turn east onto the Big Otter Creek road. Follow this road for six miles. Here the road intersects with a road that comes off of the top of the Big Otter Creek ravine from the east. Take this road to the top of the ravine. The site is in a coulee about 1/4 mile to the east.



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# MONTANA CULTURAL RESOURCE INVENTORY

## Form No. 2. Environmental Setting

Site number: 24JT157

2.1 Geographic setting:

2.2 Elevation: 1475 m 4840 ft.

General: The site is on the north edge of the Little Belt Mountain foothills.
Local: The site is on the west and east face of a coulee called Chambers Coulee.

2.3 View/aspect:
View is limited to that within the coulee. The greatest view is north and south and this is for about .5 km.

2.4 Major drainage:
McCarthy Creek

2.5 Minor drainage(s):
Chambers Coulee

2.6 Water sources:

| | Names | Distance | Ele. Change | Type & seasonality |
|---|---|---|---|---|
| a. | Chambers Coulee | runs through site | none | small springs in coulee provides water year around |
| b. | | | | |

2.7 Regional vegetation:

foothill - grassland (Payne 1973)

2.8 Local vegetation:
fir, juniper, limber pine, wildrose, Douglas hawthorne, chokecherry, mountain brome, and thick spike wheatgrass

2.9 Soils:
Light brown loam on hillsides with dark brown loam in the bottom of the coulee.

2.10 Surface visibility/season of survey:
good/early spring

2.11 Other environmental factors pertaining to site location:
The site is in the eastern portion of the Great Falls coal field.

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 3 Site Assessment and Recording Documentation

Site number: 24JT157

3.1 Condition of site: Destroyed.

3.2 Site significance (NRHP):
The mines at this site produced coal for many years. The coal was sold locally for domestic needs as well as for the local industry, i.e., farming. The coal was used to fuel steam powered tractors. However, none of the structures that were at one time located at the site remain. Since the site has lost much of its integrity it is not recommended as eligible for lisitng on the NRHP.

☐ Attachments:

3.3 Impacts:
The Department of State Lands plans to close the mine openings, and either reclaim or remove coal waste areas.

3.4 Recommendations:
The site has been recorded, mapped and photographed and no further work on the site is recommended.

| | | |
|---|---|---|
| 3.5 Site located by:<br>Gene Munson<br>Date: 4/8/87 | 3.6 Site recorded by:<br>Gene Munson<br>Date: 4/8/87 | 3.7 Revisions by:<br>Date: |

3.8 Permit No.: N/A

3.9 Publications concerning site:

Fisher, Cassius A. 1909 Geology of the Great Falls Coal Field, Montana. United States Geological Survey. Bulletin 356, 85 p.

Kolar, Julia Armont 1976 Joe Armont Family. In Furrows and Trails in Judith Basin, n.p. p. 60-61.

Munson, Gene 1987 Cultural resource inventory and evaluation of selected coal mines in the Great Falls coal field. For the Montana Department of State Lands. GCM Services, Inc., Butte.

Payne, Gene F. 1973 Vegetative Rangeland Type in Montana. Montana Agricultural Experiment Station, Montana State University, Bozeman.

| | |
|---|---|
| 3.10 Artifact repository:<br>NA | 3.11 Field notes/maps/photo repository:<br>GCM Services, Inc.<br>1003 S. Montana St.<br>Butte, MT 59702 |

3.12 Photos & accession No:

| No. | Description | View |
|---|---|---|
| 13 | overview | N |
| 14 | wagon | N |
| 15 | wagon | W |
| 16 | overview | E |

## MONTANA CULTURAL RESOURCE INVENTORY

### Form No. 5. Description of Historic Sites

Site number: 24JT157

5.1 Site dimensions, how determined:
The site measures 150 m N/S x 120 m E/W. This is the area in which the features and artifacts are located.

18,000 m2

5.2 Features:
The features at the site are placed into two categories: 1) the adits, spoil dumps and tipple remains; and 2) the features that are not associated with any particular adit.

Adit 1: The features consist of an open adit with a pile of waste and rock in front. There is no coal in the pile of waste rock.

Adit 2: The features consist of a collapsed adit, a small coal spoil dump and post remains that were the footings for a tipple.

Adit 3: The features consist of a collapsed adit, and a small coal spoil dump. A small amount of water is flowing out of this adit.

Adit 4: The features consist of a collapsed adit, a fair sized coal spoil dump and post remains that were the footings for a tipple.

Adit 5: The features consist of a collapsed adit and a very small coal spoil dump.

Adit 6: The features consist of a collapsed adit and coal spoil that has been spread over an area approximately 90 m N/S x 40 m E/W. The coal spoil is intermixed with that from adit 7.

Adit 7: The features consist of a collapsed adit and coal spoil (see Adit 6 description).

Feature 1: is a small 1.5 m x 1.5 m square platform made of tabular sandstone rubble. There are a few boards lying near the sandstone platform. Lawurence Malmberg said that when Pat (or Alix?) McAllister visited the site with him 10 years ago, McAllister said that was where the powder was stored (Malmberg 1987).

Feature 2 is a small collapsed log building.

Feature 3 is a concrete foundation. According to John McAllister a house was located on the foundation and Jack Chambers lived in it while mining at the mine (McAllister 1987).

5.3 Artifacts (observed, collected):
At adit 3 is a steel rail that was part of a track for the coal cars to run upon. Near Feature 2 are the remains of a heavy duty steel wheeled wagon. Adjacent to the wagon is a hand pump lying upon the ground.. At Feature 3 there are the remains of a wood cook stove. A few meters south of Feature 3 is part of a scale that was used to weigh the coal. At the extreme north end of the site are the remains of a farm wagon.

5.4 Historical information and evaluation: See attached.

5.5 References:
(See Section 3.9)

Malmberg, Lawrence 1987 Personal communication, April 8, southwest of Geyser, MT.
McAllister, Vincent 1987 Personal communication, April 8, Geyser, MT.
McAllister, John 1987 Personal communication, April 30, Great Falls, MT.

5.6 Subsurface testing, results, methods, etc.: None

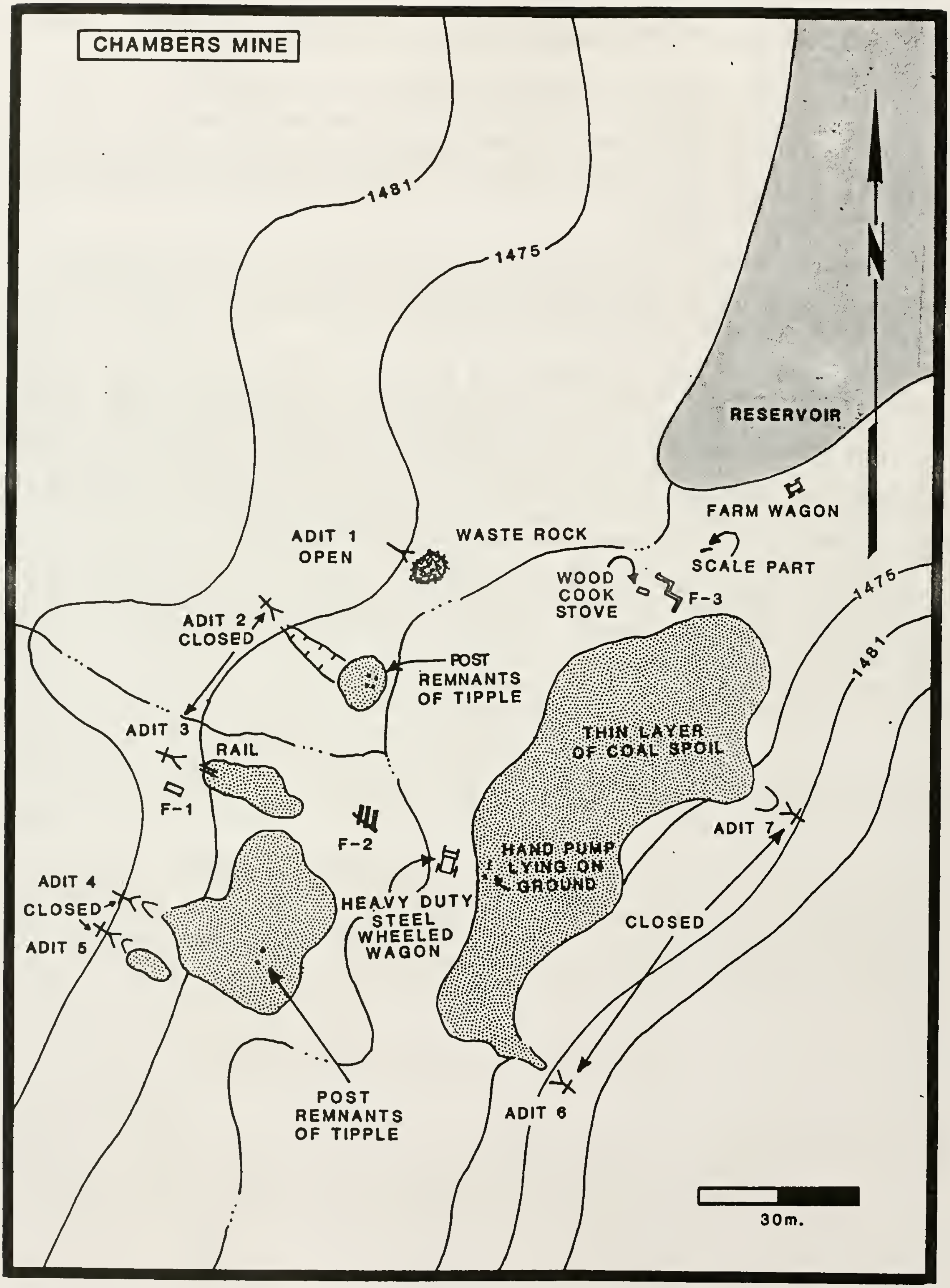
5.4 Historical information and evaluation: (continued)    Site No.: 24JT157

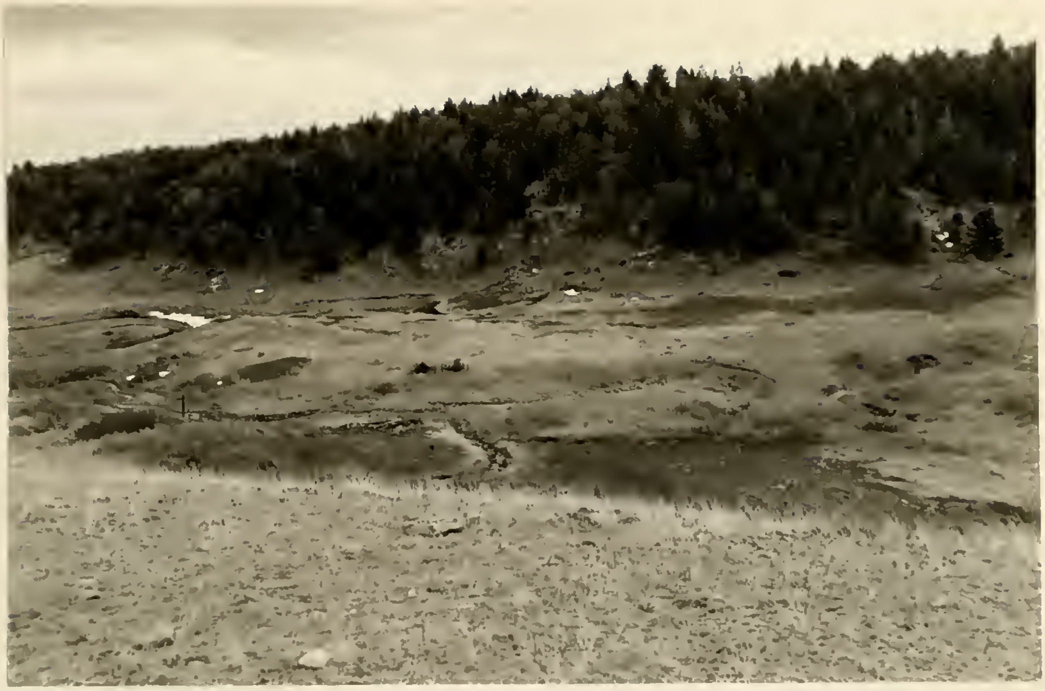
The mine was opened in 1903 by Jack Chambers and his brother. When the mine was visited by Fisher in 1906 the entry was 125 ft from the face. It was operated only during the winter months. The coal was in two seams; the lower being 14 inches thick and the upper 12 inches thick. A parting of slack material a little over four inches thick separated the seams (Fisher 1909). This mine was located on the east side of the coulee (i.e., either Adit 6 or Adit 7 on sketch map).

Around or before 1920 Joe Armont opened two adits on the west side of the coulee (Kolar 1976). Pat McAllister and his two nephews, Richard (Dick) and Vincent (Slick) McAllister worked the mine beginning in the 1920s until it was shut down in 1937 (McAllister 1987).

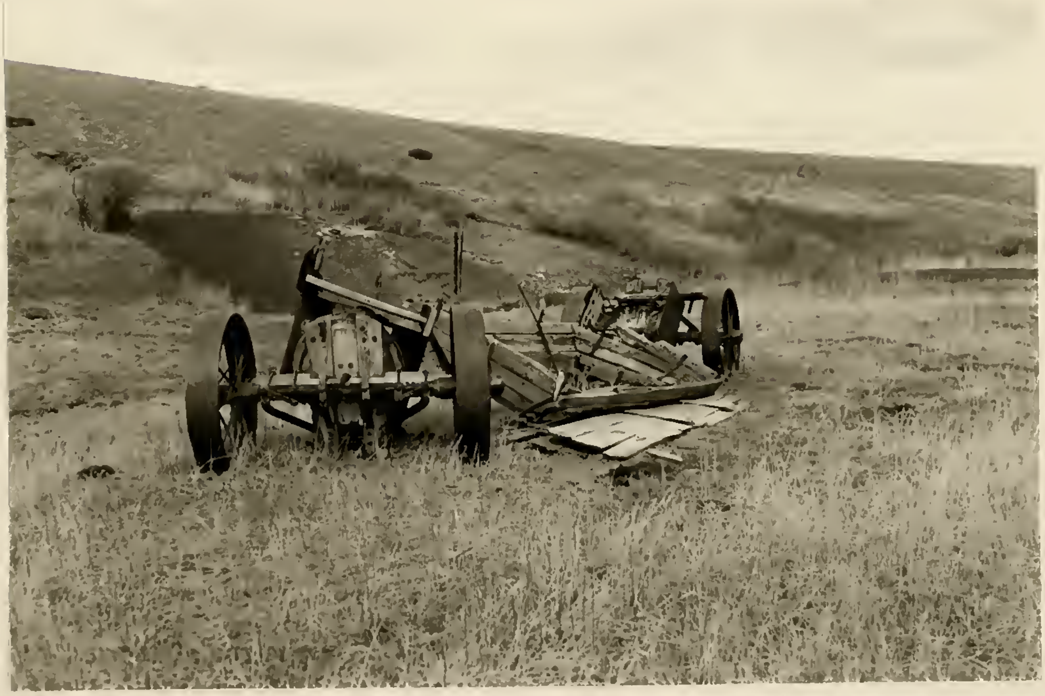
The mining technique employed was to dig a main tunnel that was five feet to six feet high and four feet to five feet wide. This tunnel was timbered and extended a quarter of a mile, at the most, into the hillside. Small rooms were dug into the coal seam. These rooms were not timbered and were the thickness of the coal seam. The coal carts were pushed out of the mine by hand to the tipple. After the coal was loaded it was weighed on a scale. The formation on the west side of the coulee dips to the east so the water in the mine drained out and no pumping was required (McAllister 1987).

Coal from the mine was sold to the Geyser community and the Raynesford community. Besides being used for domestic purposes, it was also used to fuel steam powered farm tractors (McAllister 1987; McAllister 1987a).


CHAMBERS MINE
1481
1475
RESERVOIR
N
FARM WAGON
ADIT 1
OPEN
WASTE ROCK
SCALE PART
WOOD
COOK
STOVE
F-3
1475
ADIT 2
CLOSED
POST
REMNANTS
OF TIPPLE
1481
THIN LAYER
OF COAL SPOIL
ADIT 3
RAIL
F-1
F-2
ADIT 7
HAND PUMP
LYING ON
GROUND
ADIT 4
CLOSED
ADIT 5
HEAVY DUTY
STEEL
WHEELED
WAGON
CLOSED
ADIT 6
POST
REMNANTS
OF TIPPLE
30m.



Overview of Chambers Mine (view east).



Wagon parts at Chambers Mine (view north).

# MONTANA CULTURAL RESOURCE INVENTORY

## Form No. 1 Locational Information

1.1 Site number: 24JT158

1.2 Site name/field designation: Miner

1.3 County: Judith Basin

1.4 Township/range: (see attached)

1.5 UTM: (see attached)

Zone__________ __________ Easting __________ Northing

1.6 Site type: coal mine

1.7 Recording status & comments: Photographed, mapped and recorded

1.8 Administrative/surface ownership:

Section 31: Hughes Livestock Company
Section 32: George and Dun Carver

1.9 Mineral ownership:

1.10 Project name: Department of State Lands Abandoned Mine Reclamation Program

1.11 General narrative description of site:

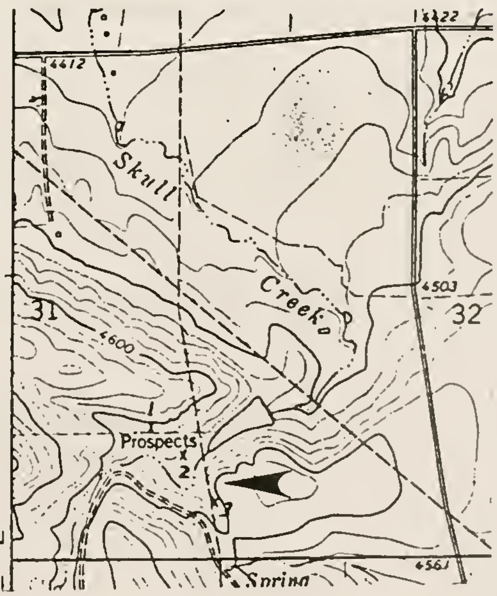
The site consists of two mines: Mine 1 has three adits and mine 2 has two adits. In front of the adits are piles of coal spoil. There are no standing structures. The site was originally a small coal mine which operated during the 1920s.

1.12 Map reference: USGS Windham, Montana 7.5 min quad 1978

1.13 City/town: ☒ vicinity of Stanford, MT

1.14 Access to site:

Drive south out of Stanford on a gravel road. Follow the road for two miles, turn west for one-half mile and then turn south one-half mile. The site is one-half mile to the northwest on Skull Creek. Walk up the creek to the site.



MONTANA CULTURAL RESOURCE INVENTORY

Form No. 2. Environmental Setting

Site number: 24JT158

2.1 Geographic setting:

2.2 Elevation: 1402 m 4600 ft.

General: The site is in the uplands between the Highwood Mountains and the Little Belt Mountains.

Local: The site is on the north and south slopeland of a coulee that is drained by Skull Creek.

2.3 View/aspect:
The view is limited generally to the northeast. This is for over 1 km.

2.4 Major drainage:
Coyote Creek

2.5 Minor drainage(s):
Skull Creek

2.6 Water sources:

| | Names | Distance | Ele. Change | Type & seasonality |
|---|---|---|---|---|
| a. | Skull Creek | at site | 6 m to 18 m | intermittent |
| b. | | | | |

2.7 Regional vegetation:
Teton River - Judith Basin Grassland (Payne 1973)

2.8 Local vegetation:

wild rose, yarrow, chokecherry, June grass, western wheat grass

2.9 Soils:

brown loam

2.10 Surface visibility/season of survey:
excellent/winter

2.11 Other environmental factors pertaining to site location:
The site is on the extreme eastern edge of the Great Falls coal field.

# MONTANA CULTURAL RESOURCE INVENTORY

## Form No. 3 Site Assessment and Recording Documentation

Site number: 24JT158

3.1 Condition of site: Destroyed.

3.2 Site significance (NRHP):
The site is one of many small coal mines in the area that played an important role in the development of the local economy at the turn of this century. Without the tipples and other structures the site has lost its capacity to convey the physical characteristics it possessed in the past. The site is not recommended as potentially eligible for listing on the NRHP.

☐ Attachments:

3.3 Impacts:
The Department of State Lands plans to close the mine opening, and either reclaim or remove coal waste areas.

3.4 Recommendations:
The site has been recorded, mapped and photographed and no further work on the site is recommended.

| | | |
|---|---|---|
| 3.5 Site located by:<br>Gene Munson<br>Date: 3/11/87 | 3.6 Site recorded by:<br>Gene Munson<br>Date: 3/11/87 | 3.7 Revisions by:<br>Date: |

3.8 Permit No.: N/A

3.9 Publications concerning site:

Government Land Office Records 1923-28 U.S. Department of the Interior, Geologic Survey, Coal Mine Serial pages, Bureau of Land Management, Billings.

Munson, Gene 1987 Cultural resource inventory and evaluation of selected coal mines in the Great Falls coal field. For the Montana Department of State Lands. GCM Services, Inc., Butte.

Payne, Gene F. 1973 Vegetative Rangeland Type in Montana. Montana Agricultural Experiment Station, Montana State University, Bozeman.

| | |
|---|---|
| 3.10 Artifact repository:<br>NA | 3.11 Field notes/maps/photo repository:<br>GCM Services, Inc.<br>1003 S. Montana St.<br>Butte, MT 59702 |

3.12 Photos & accession No:

| No. | Description | View |
|---|---|---|
| Frame 1 | overview | N |
| Frame 2 | mine 1 - adit 3 | E |
| Frame 3 | mine 2 - adits 1 and 2 | S |

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 5. Description of Historic Sites

Site number: 24JT158

5.1 Site dimensions, how determined:
420 m NW/SE x 60 m SW/NE. This is the area in which the features are located.

25,000 m2

5.2 Features:
There are two separate mines at the site. The adits and associated features for each mine is described separately. Besides the adit related features there is a house foundation and this is termed as Feature 1.

Mine 1

Adits 1 and 2 which are adjacent to each other, are collapsed. A coal spoil dump, spoil dump, and the remnants of two tipples are located in front of the adits. All that remains of the tipples are a few upright posts.

Adit 3 consists of a collapsed adit, coal spoil dump and the remnants of a tipple. All that remains of the tipple are a few upright posts.

Mine 2

Adit 1 consists of an open adit, coal spoil dump and the remnants of a tipple. All that remains of the tipple are a few upright posts.

Adit 2 consists of an open adit and a small coal spoil dump.

Feature 1 is a leveled off place on the hillside west of adits 1 and 2 at Mine 1. A rectangular foundation made of a few stacked sandstone rocks is located within the leveled off area. It measures 16 ft x 10 ft east/west. Scattered around the feature are ashes, coal clinker, bed remains, bottle glass and part of a wood cook stove.

5.3 Artifacts (observed, collected):
In the area of Feature 1 are pieces of broken bottles, a bed frame and part of a wood cookstove. At Mine 1 is a mine cart wheel, and plow disc. At Mine 2 there is a piece of cable.

5.4 Historical information and evaluation:
Coal was probably first mined on the site by Roy V. Miner who in 1924 received coal lease permit Billings 023036 to mine coal in the N1/2 SE1/4 of Section 31. The lease was cancelled in December of 1928 (GLO Records 1923-1928).

Gerald Hughes, who has lived a few miles south of the mines all his life, remembers a person named Boot Legger Charlie Taylor who was mining at the site around the end of the 1920s. The coal seam that he was mining dipped at several degrees away from the mine entrance requiring the coal cars to be pulled out with a cable attached to a capstan (Hughes 1987).

The mine was a small wagon mine selling coal locally.

5.5 References: (See Section 3.9)
Hughes, Gerald 1987 Personal interview, March 11, south of Stanford, MT.

5.6 Subsurface testing, results, methods, etc.: None

## 1.4 Township/range: (continued)

T16N R12E

Mine 1

Adits 1 and 2: SE1/4 NE1/4 SE1/4 Section 31
Adit 3: NE1/4 SE1/4 SE1/4 Section 31

Mine 2

Adits 1 and 2 SW1/4 SW1/4 SW1/4 Section 32

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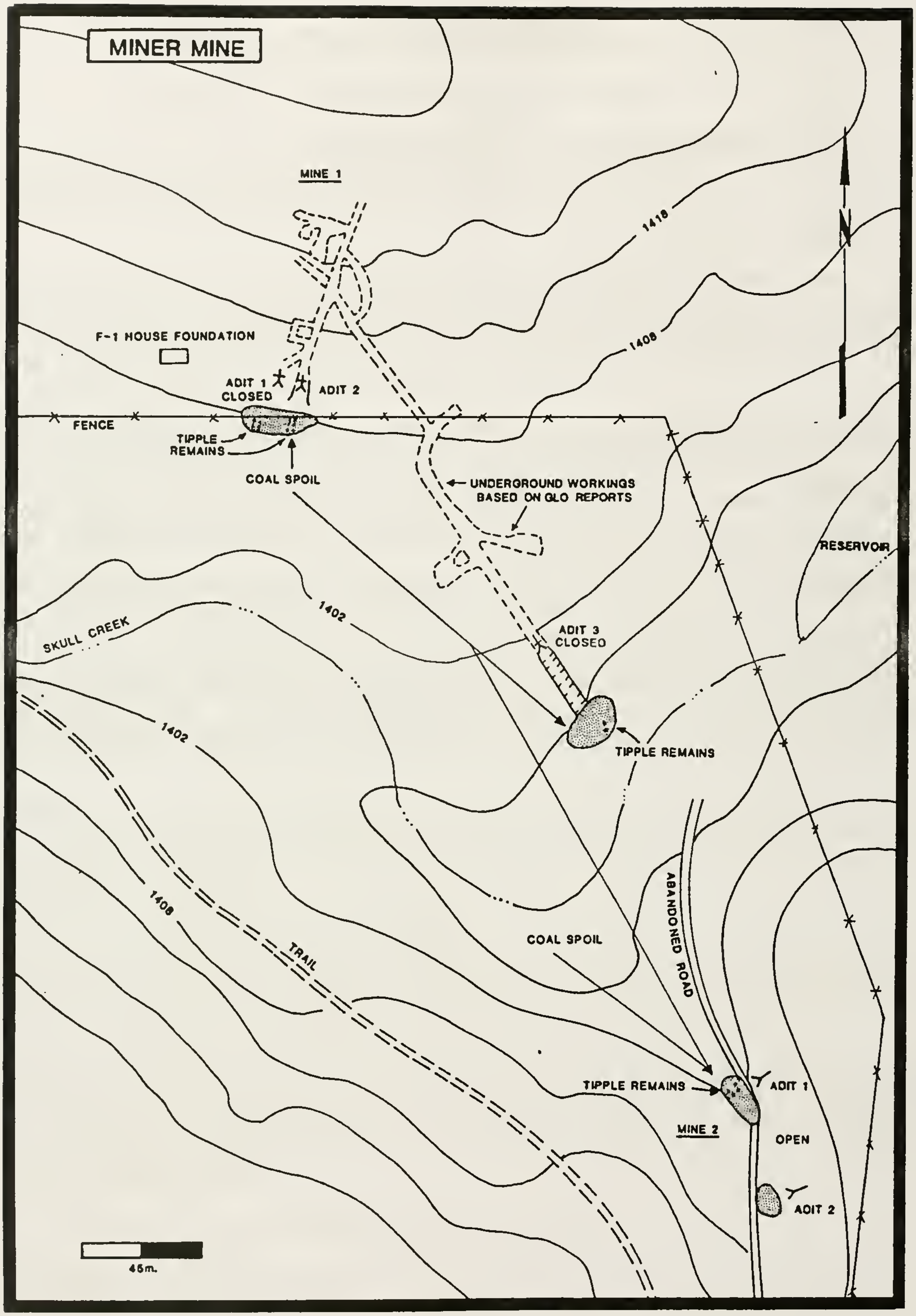
## 1.5 UTM: (continued)

Mine 1

| | | | | | |
|---|---|---|---|---|---|
| Adits 1 and 2: | Zone 12 | 557 350 | Easting | 5216 520 | Northing |
| Adit 3: | | 557 470 | Easting | 5216 450 | Northing |

Mine 2

| | | | | |
|---|---|---|---|---|
| Adit 1 | 557 580 | Easting | 5216 300 | Northing |
| Adit 2 | 557 580 | Easting | 5216 260 | Northing |


MINER MINE
MINE 1
1418
1408
F-1 HOUSE FOUNDATION
ADIT 1 CLOSED
ADIT 2
FENCE
TIPPLE REMAINS
COAL SPOIL
UNDERGROUND WORKINGS BASED ON GLO REPORTS
RESERVOIR
SKULL CREEK
1402
ADIT 3 CLOSED
TIPPLE REMAINS
1402
1408
TRAIL
ABANDONED ROAD
COAL SPOIL
TIPPLE REMAINS
ADIT 1
MINE 2
OPEN
ADIT 2
45m.

Overview of Miner Mine (view north).